

THE ATHLETIC JOURNAL

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Football Offense in Nineteen
Thirty

Checking the Attack

E. P. Madigan

Defensive Line Play

E. E. Wieman

Early Plans for Basketball

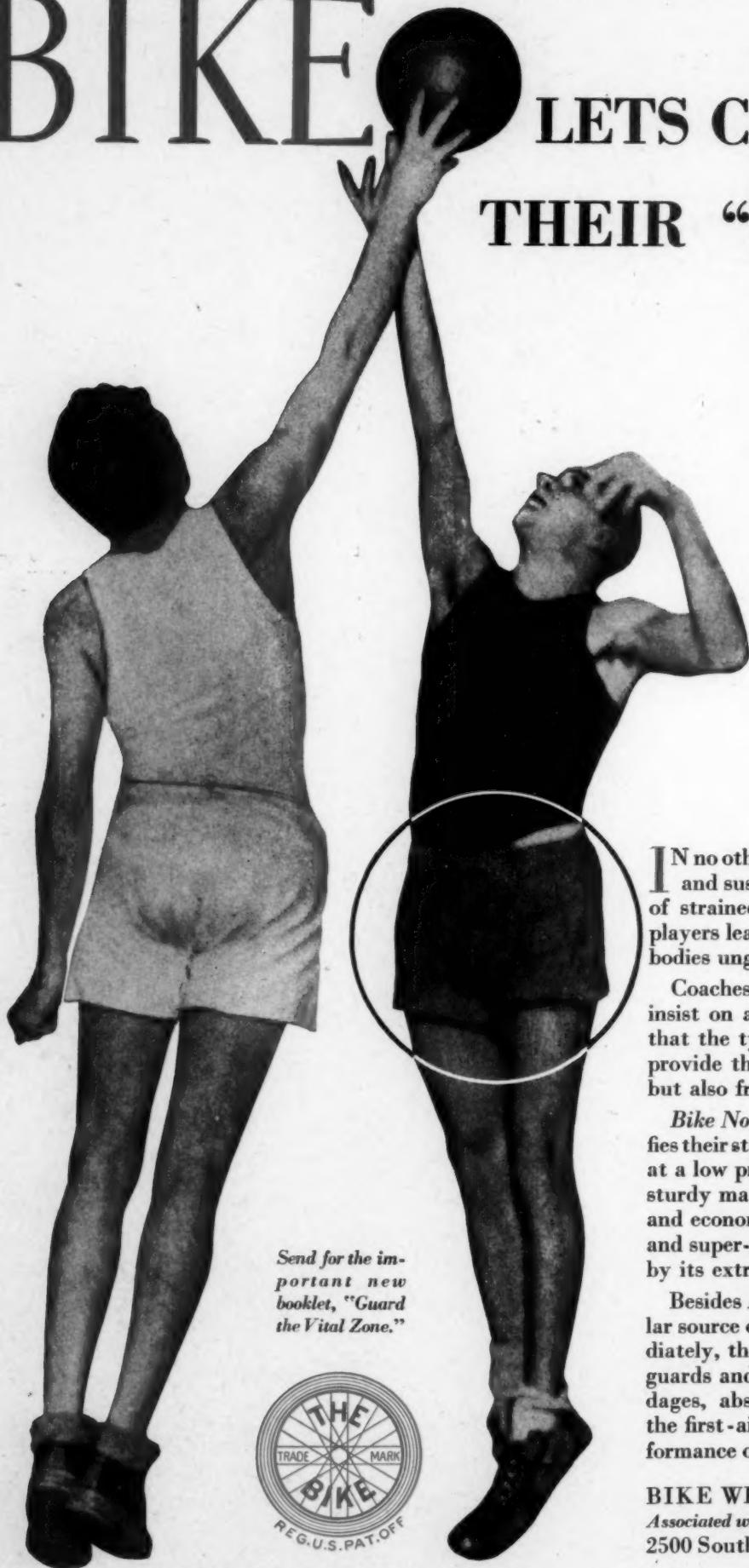
R. H. Hager

Developing the High School
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The New Football Rules

JUDGING from the officiating in the games thus far played, the new football rules are an improvement over the old rules. In only a few cases has it been reported that the officials failed to understand the rules governing usual game situations. Some officials make the mistake of spending their time in thinking up impossible and improbable plays and at the same time neglect to review the basic rules, rules which govern plays that arise in nearly every game. While it is interesting from the standpoint of the officials to try to conjecture all of the different plays that might occur, yet after all it is far more important for them to be absolutely certain of the application of the rules to plays that are bound to occur.

Football Attendance, 1930

SOME people, noting the fact that some of the largest college stadia were not filled in the early October games, have assumed that the interest in football is diminishing or that the size of the crowds has been affected by financial and industrial recession in this country. While it is probably true that business conditions have affected and will affect the attendance at games this year to some extent, yet the attendance at the late October games indicates that, though the people may not spend money for other things, they are still willing to spend small sums of money as individuals for football tickets.

After all, amateur athletics can be conducted on small budgets. If the players were paid salaries, however, and if the spectators' interest were to diminish, then it is quite probable that a good many schools and colleges would give up inter-institutional athletics. As it is, however, the educational institutions will continue to conduct extra-mural sports whether the crowds are large or small. So far as 1930 is concerned, the crowds will be nearly as large as were the crowds of 1929.

Uniform Signals

IN some sections of the country the referees are giving signals to indicate the character of the foul which has been penalized on the field. This is an aid to the coaches, sports writers, and to those who operate the loud speakers or score boards. It would be a fine thing if all referees made use of a uniform and simple set of signals to be used in connection with penalties imposed. If this were done, in a short time the spectators would come to look for the signals, and thus they would have a more intelligent idea of what is going on in the game.

A Pre-Holiday Suggestion

TO the coach who is in the usual Christmas shopping quandary, the ATHLETIC JOURNAL offers a way out. The best wish from any coach to each of his friendly rivals is a winning team. More practical than the mere wishing is a subscription to the ATHLETIC JOURNAL. In case the friendly rival is already a subscriber, his subscription will be extended. A notice of the gift subscription will be sent by the ATHLETIC JOURNAL.

The ATHLETIC JOURNAL

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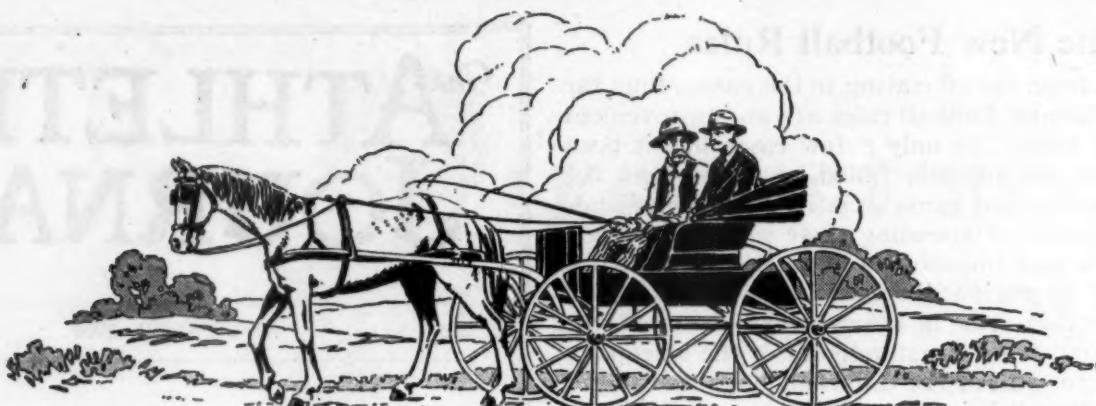
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Volume XI

CHICAGO, ILLINOIS

No. 3



Checking the Attack

By E. P. Madigan
Football Coach, St. Mary's College

GENERALIZATION concerning defensive play, strength at the point of attack, and the theory of the shifting defense were our topics in our introductory discussion of the defense in football. Let us now consider the formation we favor from which our checking of attack is to evolve and some of the fundamentals necessary to make that formation and that evolution successful.

The formation which we feel comes nearest this theory of defense is commonly called the 7-2-2. We like to use a seven man line because of the great number of maneuvers possible, and we try to pick out *Seven Stubborn Stalwarts* and *season them in service and success*. Sometimes it is easy to season them in service but difficult in success. In the backfield we use the box defense and we try to pick out our two most rugged backs best adapted to mass play tackling, and place them as close behind the line as their ability will permit them to play, because we feel that *a line is no stronger than the men who back it up*. By moving the backs up as close as

possible this way, it is difficult for linemen coming from the weak side, or backs or running guard coming through the hole, to pick them off. Yet they must be able to diagnose a pass play quickly and develop the knack of following a man down under a forward pass just as quickly as a basketball man does on the court during a basketball game. If they are unable to do this, then they must be moved back according to their ability. The remaining two backs that go to

make up the end of the box should be exceptionally fast, deadly open-field tacklers, and both must be adept safety men. From this, let the defensive flow.

The fundamentals that go to make up an end, guard or a tackle must be carefully pursued to have any success with any defense whatever, and in line play most football men will tell you that "getting the jump" is half the battle. Now, whether a standing line or a crouching line is used does not matter. However, use should be governed by the tactical situation and the type of offense being met. We do not believe that any man in a football game should ever be off his feet except when blocking; and, if he is never off his feet, his head is generally up and his eyes are open. If it is at all possible to stand up a man with an open stance, better results will be obtained.

Here, it would be well to go into the details of the fundamentals of each individual position, but, for the sake of covering more ground, we must assume that they are known, and con-

SURPRISE is as necessary to the defense as the offense, is the belief of E. P. "Slip" Madigan. In this article, the last of a series on defense, this California coach explains the types of defense used by St. Mary's football teams, which have had unusual success under Coach Madigan's guidance.

tent ourselves with simply naming some of the stunts or methods that individuals might use. Nomenclature employed in football varies with each part of the country, the style of play, and particularly with the coach using it, but the names used here aim simply to be descriptive of the actions of the individual. For example, the term "riding the guard" means that the defensive guard or center charges sharply through the hole vacated by the guard pulling out, generally by means of slapping to the ground the linemen intended to block his hole, then pursuing as closely as possible the guard who has pulled out. If the defensive man is fast enough, sometimes he is able to grab hold of the guard's belt or jersey, and as this man generally leads to the ball carrier, it naturally follows that he will take our defensive man to the ball. In this regard it is not necessary to follow the ball, but to follow the guard, advice which violates a fundamental.

"Pulling out with a guard" is another effective measure to bring one to the point of attack or to the ball carrier. Sometimes a defensive guard or center may study closely the actions of the running guard, charging blindly one step. If the guard charges forward he has met his opponent and taken the charge off of him. If the guard pulls out in the interference, the defensive guard or center may retrieve his step and also pull out behind his own line, following the offensive guard out of the corner of his eye, going to the same spot towards which the offensive guard is diving. In this matter the defensive guard is taken to the point of attack because running guards generally lead plays. One may say, "Yes, but suppose the offensive pulls out their guard and drives the play through the hole he pulled out of." True, they may gain yardage, but by mixing up "riding the guard" and "pulling out with the guard" it is problematical if they will gain ground. Then, too, we never yet saw a game won on check plays.

"Crossing up of assignments" is another effective measure in defensive line play. Most offensive teams in the design of their plays have special interference as contrasted to general interference. By that we mean particular assignments are given to each individual on offense to take certain men out of the play. When the defensive so plays that these assignments are crossed up, a general scramble is the result, losing the cohesion necessary for the successful execution of the play. For example, if the halfback was supposed to take out the end, and he didn't find the end there but instead the tackle, confusion

would result. This may be obtained by smashing the end and drifting the tackle. The end smashes first, and the tackle crosses over behind him. In this way the end has covered the tackle's territory and the tackle has covered the end's territory. In tactics of this kind, however, close coordination is necessary and even signals by word of mouth between tackle, end and defensive back in order that each may know what the others intend to do. This method has proved very effective against wing-backs and spinners. However, it takes a rugged pair of ends to play this game.

"A loose end" is another effective means of strengthening secondary defense against running plays and assisting on forward pass defense. "A loose end" is always the short side end and is generally at liberty to do whatever he wants—charge, back up his own line, or cover on passes—whatever the tactical situation might demand.

"A sagging tackle" on the short side, particularly when used in combination with a loose end, is a very effective means of backing up the line. However, in this case, the loose end and sagging tackle also must have a code by which they will always keep one in there firing the gun when the other one is loose or sags. Using a sagging tackle and a charging end is a very effective method of rushing forward passes from behind. Generally speaking, guards or backs who protect the passer block or protect in the direction in which the passer is running or is going to pass. A short side end can certainly do a great deal in breaking up or in hurrying a pass play, while at the same time the sagging tackle can help cover the pass. There is not much use in everyone rushing a passer when he is back a mile. Let one or two rush him, and let the others cover. For instance, we saw a game on the Coast where the passer stood about seven yards back and then ran back to pass; so did the defense to cover. The passer tried to run once, and the defense closed in and downed him. He almost made the line of scrimmage.

We certainly would like some statistics on how many forward passes a center breaks up or intercepts during the course of the season. Of course when it is obvious to everybody, including those listening in on the radio, that a forward pass is going to be the play, a center may maneuver into a favorable position, but when the strategic situation is such that there is an element of doubt as to what the play will be, we think a center is of more value in charging, riding the guard or pulling out with the guard.

As a whole, a fiercer charging line is the thing that breaks up plays, and plays are broken up before they start, or they are not broken up short of some gain. We like to do as the Germans did: fight the war in the other fellow's territory. The war was fought in France, Belgium and Russia. Play the game across the line of scrimmage in the other fellow's backfield.

A hard charging line will not clutter up traffic and, if they do not get the ball carrier, at least they will not come flopping back as interferers for the opponents. Linemen should charge and get out of the way and let the backs tackle the runner. Backs should come up fast whenever they "see daylight" through the line and plug the hole. Right in the hole is the easiest place to tackle a clever back. He has only a lateral yard at the most to do his stuff in, whereas, once through the hole, he has the width of the field and many prospective interferers. Backs who back up the line should get plenty of practice at this work, and all backs should specialize in their defensive position and not be moved from pillar to post during a season or a game.

Backs should be assigned responsibilities for different sectors of the line play on a graduating scale. For instance, the left fullback should be made fully responsible for plays between end and tackle, and partly responsible for plays outside of end; defensive left half fully responsible for plays outside of end and partly responsible for plays between tackle and end; and weak side fullback responsible for cut-back plays.

Another stunt that helps particularly the defensive backs is for the weak side or short side of the defensive line to put down or jam up the weak side of the offensive line, which is generally coming across to block out secondary or lead the interference. This makes it easier for the backs to come up and tackle at the line.

And so it should go with each individual position and with each situation that is to be confronted. Suspense is the big element in offense, and suspense should be the big element in defense. Do the unexpected, making it look like the expected. When the orthodox move is the expected thing, do the unorthodox. But oftentimes the orthodox may by its very nature be the unexpected. Remember that Bismarck told the diplomats of Europe the truth, but they, knowing the correct thing for diplomats was to deceive, refused to believe him, which was just what the Iron Chancellor wanted. Let us take a lesson from diplomacy; let us vary our deception in defense.

A strong line helped Wisconsin defeat Chicago, 34 to 0. Oman of Wisconsin is shown carrying the ball.



Football Offense in Nineteen Thirty

Diagrams and analyses of formations and plays used by representative college teams in games this fall

WHEREAS, a few years ago, power plays were the vogue in American college football, this year formations that are designed to facilitate a running and passing attack are very much in style. While some of the old timers may miss the driving plays through the line, plays that were designed to get to the point of the attack as soon as possible after the ball was passed, yet, after all, the football that is being played by the colleges quite generally this year is a better game than the old game, from the standpoint of both the players and the spectators.

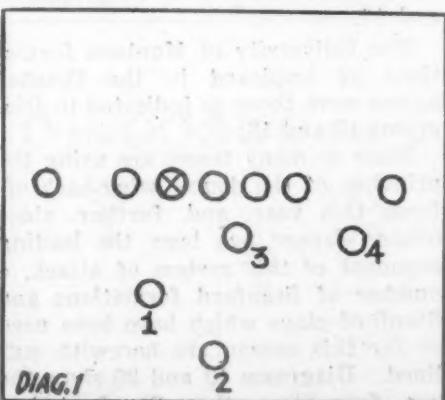
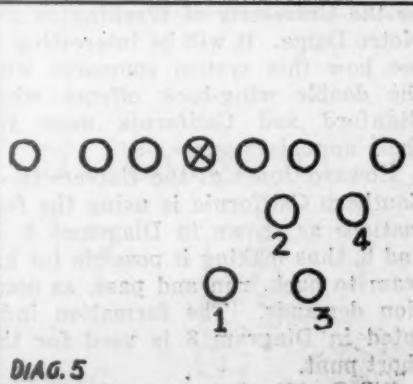
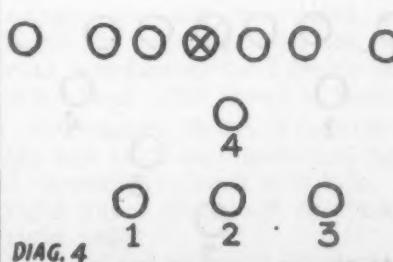
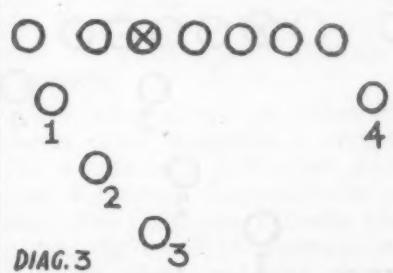
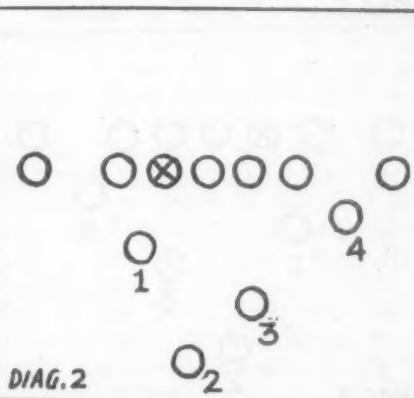
The double wing-back formation has caught the fancy of the coaches and has in many sections at least superseded the old Minnesota shift, which was developed by Harry Williams in 1910.

The majority of the college teams are playing a six-man line against a double wing-back offense with either a 3-2 or a 2-2-1 formation in the backfield. The ends are coached either to drive in against the wing-backs or

to move out when wide sweeping end runs are imminent. When the ends drive in, the tackles play a waiting game against the opposing end and pull outside to tackle the runner if the end has taken off the interference. With this defense, the ends do not make so many tackles behind the line of scrimmage as is possible when a seven-man line is used, but the auxiliary ends or the backs playing back of the ends have a clear opportunity to tackle the runner on wide runs.

The individual blocking that was so common a few years ago, a system which consisted of delegating a definite assignment to the interfering backs, apparently is giving way in part at least to the loose interference system in which the interferers run high and the man with the ball dodges either to the outside or inside as he sees fit.

The smart teams are using both the zone and man-for-man defense against passes, and sometimes, when it is clear that a pass is coming, a guard or tackle may pull out of the line.



Some sports writers have called attention to the fact that some of the scores in games between traditional rivals have been larger than usually is the case. This is explained by the fact that teams are now trying to score by runs from 25 or more yards from the goal and by forward and lateral passes. It is not uncommon to read that such and such a team attempted thirty passes and it also is not uncommon to read that such and such a team on defense scored by intercepting a forward or lateral pass. The lateral pass is an attractive feature of modern American football. It, however, has not as yet been used in such a manner as to result in many touchdowns or long runs. Perhaps the coaches will in the future find latent possibilities in this play that today is largely valuable only for the purpose of adding deception to the attack.

The Pacific Coast

Washington State College has one of the most powerful teams in the Pacific Coast Conference, as is witnessed by the fact that this team won from the University of Southern California and the University of California on successive Saturdays. Diagrams 1, 2 and 3 represent the basic formations being used this year by Washington State.

Jimmie Phelan, coaching the University of Washington team for the first time, has already developed a stronger team than was expected of him. He has discarded the type of offense that the Huskies have relied on in former years in favor of his modification of the Notre Dame shift. On an original formation as outlined in Diagram 4, the team starts with a balanced line and the regular backfield formation. After the shift the men may come into a position as shown in Diagram 5 with both ends out or with one end close and the other a yard or so out. Further, the backfield formation is sometimes used back of an unbalanced line.

"Nibs" Price at the University of California is this year developing an attack very similar to that employed by the University of Washington and Notre Dame. It will be interesting to see how this system compares with the double wing-back offense when Stanford and California meet for their annual classic.

Howard Jones at the University of Southern California is using the formations as shown in Diagrams 6, 7, and 8, thus making it possible for his team to buck, run and pass, as occasion demands. The formation indicated in Diagram 8 is used for the short punt.

Bill Spalding's team at the Univer-

sity of California at Los Angeles is using the formations as indicated in Diagrams 9 and 10, with the single and double wing-back principles involved in his attack.

Dr. Spears, formerly of the University of Minnesota, and now coaching the University of Oregon team for the first time, is starting his plays from the formations as outlined in Diagrams 11 and 12.

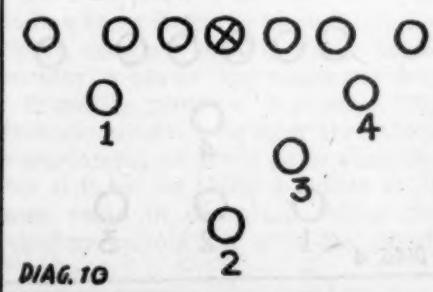
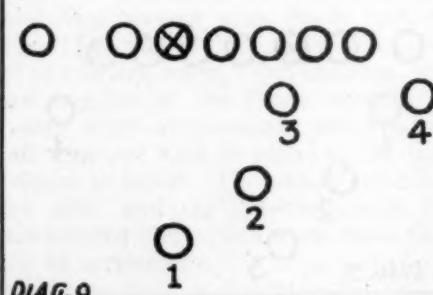
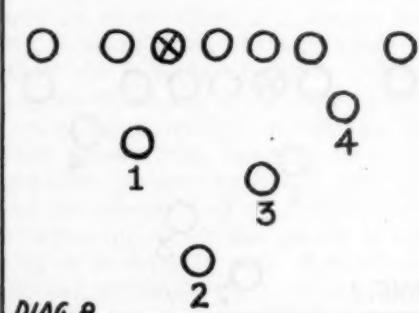
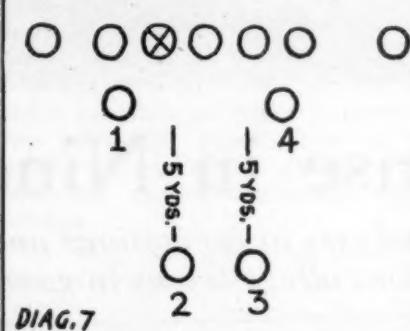
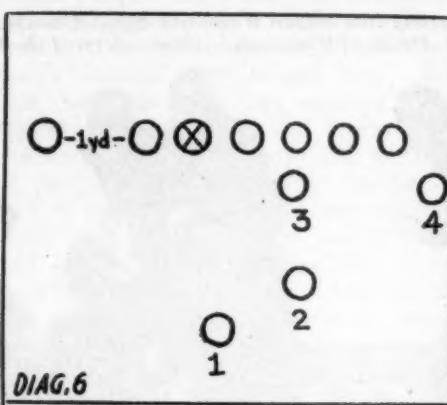
Diagram 13 shows the University of Oregon formation with an unbalanced line and a box formation of backs on the strong side. The play shown in this diagram is a wide end run by the quarterback, or the No. 3 back, to the weak side. On this play the No. 1 and No. 2 backs take the weak side defensive end out. The strong side tackle and the No. 4 back lead the play between the defensive end and the defensive tackle and go down for the secondary. The No. 3 back receives the ball from center and makes a complete pivot to his right, faking the ball to the No. 4 back as that back swings across; then the No. 3 back swings back and wide to the weak side.

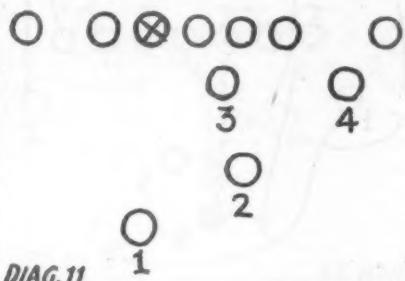
Diagram 14 shows a follow-up play from the Oregon formation shown above in Diagram 13. This play is a lateral pass to the weak side, and starts the same as the preceding play. The No. 1 back goes out wide to the weak side; the No. 2 back goes through the opening between the defensive end and the defensive weak side tackle and on down for the defensive halfback. The strong side tackle and the No. 4 back swing across to the left and lead the play, going just outside the weak side defensive tackle. The No. 3 back receives the ball from center, makes a full pivot to his right, fakes the ball to the No. 4 back, then follows in behind the strong side tackle and the No. 4 back, and makes an overhand lateral to the No. 1 back as indicated.

Paul Schissler's Oregon Aggies, which played a great game against Warner's Stanford team on October 18th, are using for the basic formations those outlined in Diagrams 15 and 16.

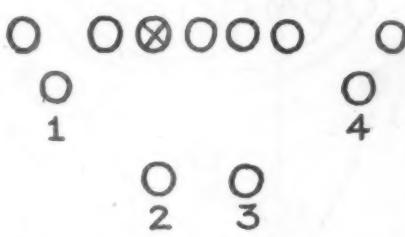
The University of Montana formations as employed in the October games were those as indicated in Diagrams 17 and 18.

Since so many teams are using the principle of the double wing-back offense this year, and, further, since Glenn Warner has been the leading exponent of this system of attack, a number of Stanford formations and Stanford plays which have been used so far this season are herewith outlined. Diagrams 19 and 20 show the two formations that Stanford has

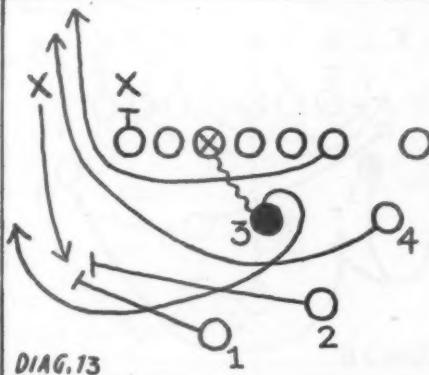




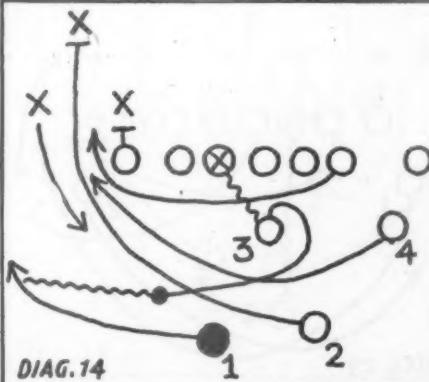
DIAG. 11



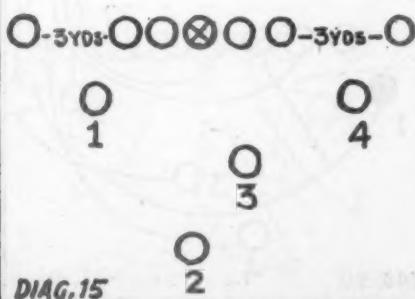
DIAG. 12



DIAG. 13



DIAG. 14



DIAG. 15

used most consistently so far this year.

Diagram 21 shows the Stanford University double wing-back formation with an unbalanced line, ends close, and the two wing-backs one yard back and one yard outside their respective ends. The No. 2 back is about two yards back of the strong side guard and the No. 1 back about three and one-half yards back of center.

The play shown from this formation is a forward pass to the weak side end across behind the defensive line, who then makes a lateral pass to the strong side wing-back, No. 4. The play starts as a running play to the strong side. The two guards swing out for interference to the strong side, the No. 2 and No. 3 backs also start across to the strong side the same as in interference on an end run; the center passes the ball to the No. 1 back, who starts a run to the right, then passes to the weak side or left end across, who completes a lateral to the No. 4 back.

Diagram 22 shows a forward pass following a double pass in the back-field. In this play the left end goes straight down and hooks a little to his right. The right end goes straight down. The No. 2 back goes diagonally out to his right. The ball is passed from center to the No. 1 back, who starts to his right and gives the ball to the No. 4 back. Back No. 4 swings back to his left and gives the ball to the No. 3 back, who swings deep to the right and passes to any point uncovered—usually to the No. 1 or No. 2 backs.

In Diagram 23, No. 1 is in motion when the ball is snapped to 4, who follows 3 through the hole on the strong side of the line. This is an effective line play because it enables four linemen to block their opposing two forwards.

The play shown in Diagram 24 starts from Warner's A formation. No. 4 cuts back to the left and follows 3 through the weak side opening. The right guard blocks the opposing right end, if necessary, and 2 and the right end cut down the secondary.

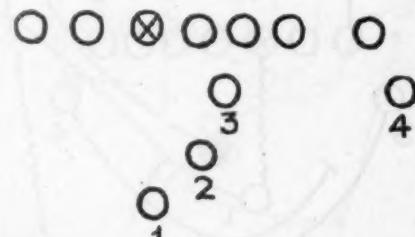
In Diagram 25, No. 4 passes the ball to 2 for a run around the weak side end. The right tackle leads the interference and the right guard blocks the opposing right end. No. 3 runs interference for 2 inside or outside of end. (Not shown in diagram.)

In Diagram 26, No. 4 fakes to pass the ball to 1, half spins and follows 3 through the weak side hole. The right guard blocks off the opposing right end.

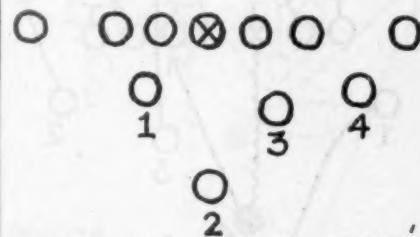
One of the strongest Stanford plays



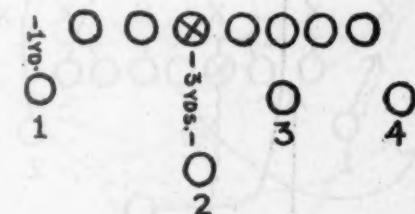
DIAG. 16



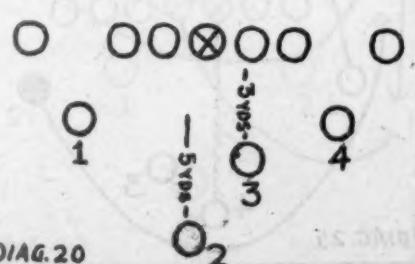
DIAG. 17



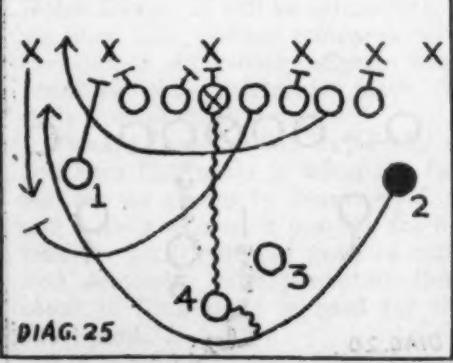
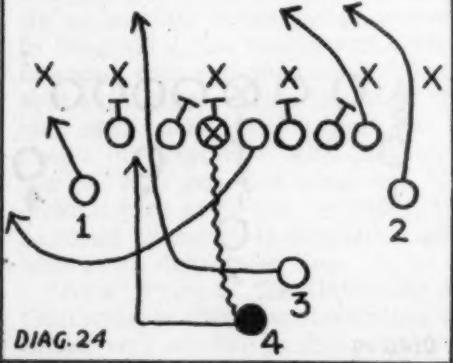
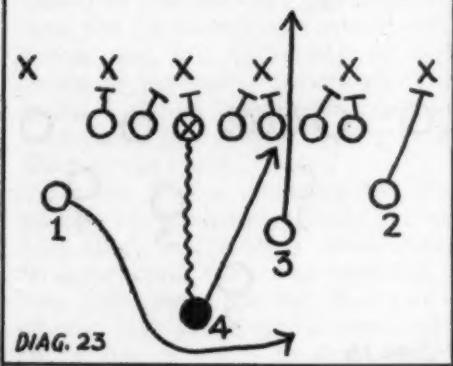
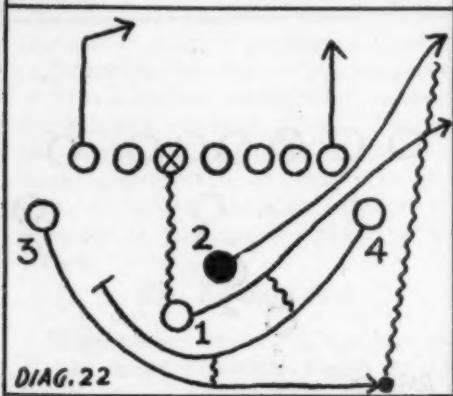
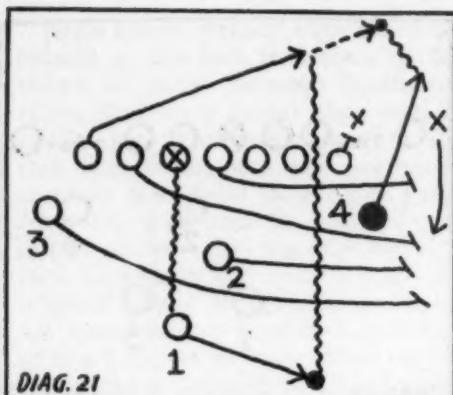
DIAG. 18



DIAG. 19



DIAG. 20



is the one shown in Diagram 27. No. 2 starts to the right and gives the ball to 4, who is swinging to his left and who, in turn, passes to No. 1 going to the right. No. 3 blocks the opposing left end. No. 1 follows the three linemen around their own right end.

Diagram 28. The ball is snapped to 4, who passes to 2, who in turn passes to 1 for a run around his own left side; back No. 3 and two linemen, as indicated, making the interference.

In Diagram 29, No. 4 fakes to give the ball to 2; then follows his interference to the right, usually cutting back between the opponents' left guard and left tackle.

In Diagram 30, No. 1 receives the ball from the center while in motion toward his own goal and follows the interference for a wide end run or a cut-back. No. 3 protects to the outside, warding off the opposing left end if he comes in.

In Diagram 31, No. 4 receives the ball from center, steps back, fakes a pass and then drives through the short side, following his right tackle and 3. The right guard protects from the outside to the left.

In Diagram 32, No. 4 makes a short forward pass behind the line to No. 2; the right tackle, the right guard and 3 giving him interference and protecting him from the opposing right end.

A forward pass play is outlined in Diagram 33. No. 4 receives the ball from center, runs back to the left and passes to 3, who is protected by the right guard. If 3 is covered, the pass may be thrown to 1 or to one of the ends.

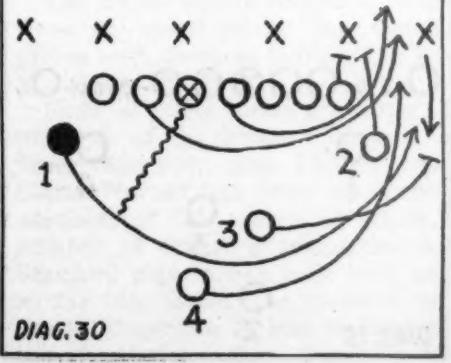
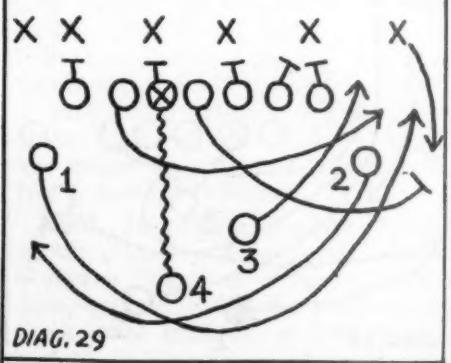
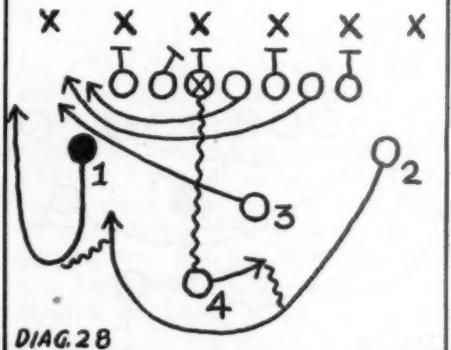
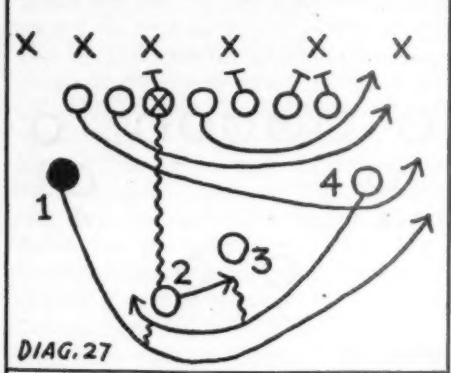
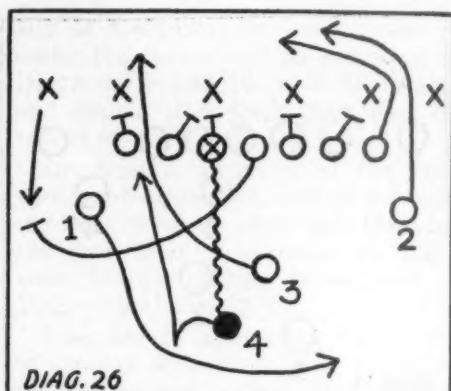
The play in Diagram 34 starts from the C formation. This is a quick, short pass, usually to the right end as indicated. No. 1 and the left end and 2 and 3 are also possible pass receivers.

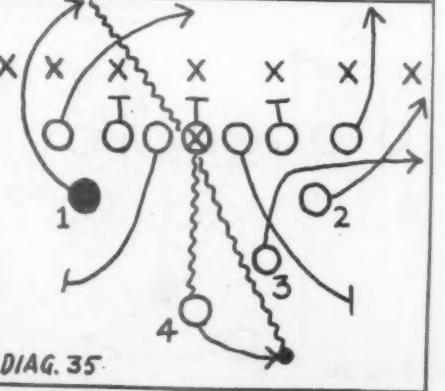
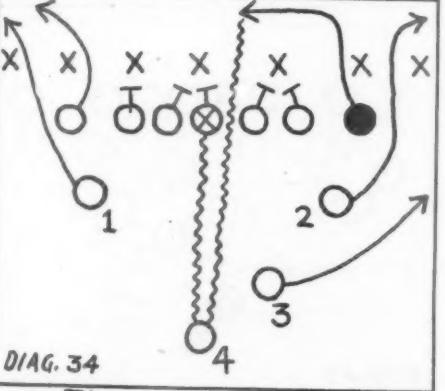
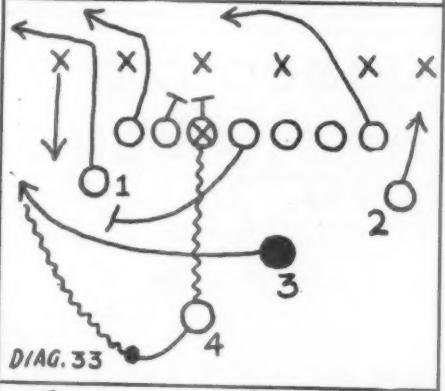
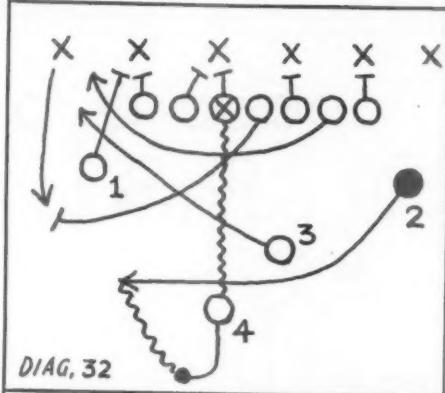
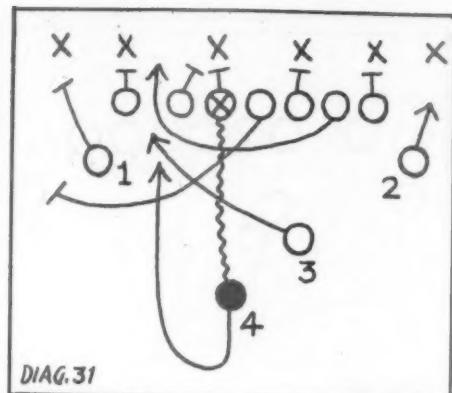
Diagram 35 shows a long pass from the C formation. While the formation as outlined shows the pass to 1, No. 4 has the option of passing to the left end, the right end, or to 2 or 3. The left guard protects against an intercepted pass on the left side, and the right guard protects the passer, and guards against an intercepted pass if it be made on the right side.

Diagram 36 is a running pass by 1, who gets the ball from center and who may pass to one of the ends or to 3 or 4 as indicated.

The play as outlined in Diagram 37 is another running pass, this time from 4 to 1, who is the short man behind 2 or the right end. The two guards protect to the right, as shown in Diagram 38.

Diagram 38 shows a running pass in which the two guards protect on





the right side. The pass is usually made to 3, although it may be made to 1, 2, or either of the ends.

In Diagram 39, No. 2 fakes the ball to 1, spins and passes to the left end, the right end or 3, as indicated. No. 4 runs slowly to the left if the tackle is rushing in to block.

The Missouri Valley Section

In the Missouri Valley section the old power formations have quite generally given way to a type of football which stresses passing and running plays.

Dana Bible has been using a modified punt formation at the University of Nebraska, as shown in Diagram 40. No. 4 plays close on certain plays and back on others. With a balanced line and the ends out, punts, passes, runs and bucks are possible, and, with a triple threat man playing back, this is one of the best formations in football.

Diagram 41 shows an unbalanced Nebraska line with two wing-backs, from which runs and passes may be expected. Spinners and reverses also are possible, especially behind a good line. The double wing-back formation under most conditions is not strong from a line bucking standpoint.

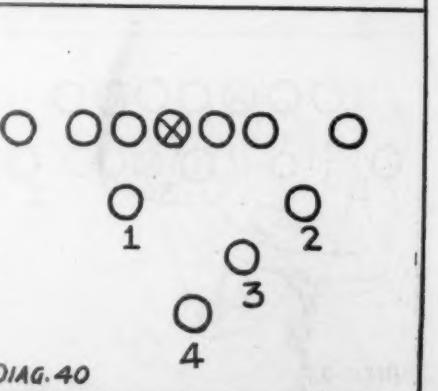
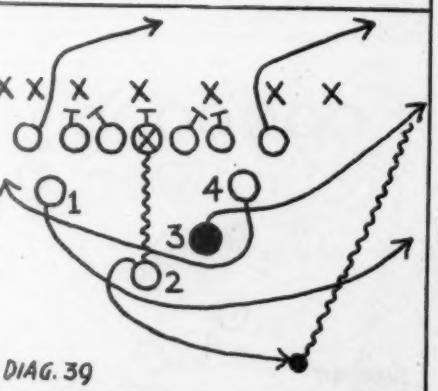
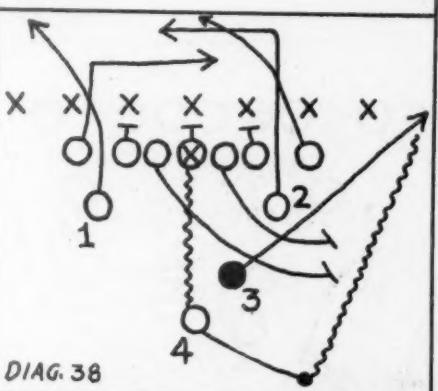
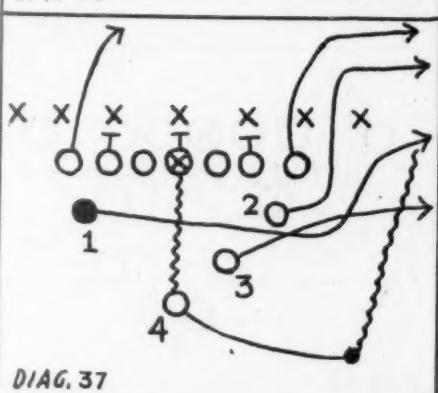
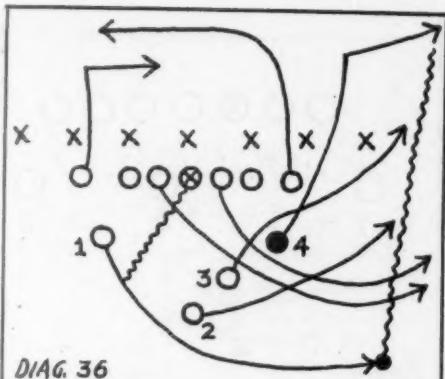
Ad Lindsey at the University of Oklahoma is again using the punt formation very effectively. In the Nebraska game on October 11th, Oklahoma ran up a good score, using the same formation that this team used last year against the University of Chicago. Formations as indicated in Diagrams 42 and 43 are the ones from which most of Oklahoma's plays have started this year.

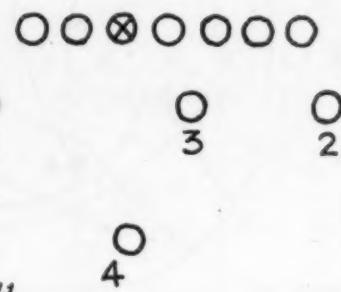
Bill Hargiss, with a powerful University of Kansas team, has used the formation shown in Diagram 44 for bucks, runs, and passes. In this formation, 4 is the key man in the runs, with 2 blocking the tackle and the guards together with backs 1 and 3 in the interference.

Diagram 45 shows the double wing-back formation with an unbalanced line in which 3 is the key man on spinners and reverses with 1 sometimes in motion.

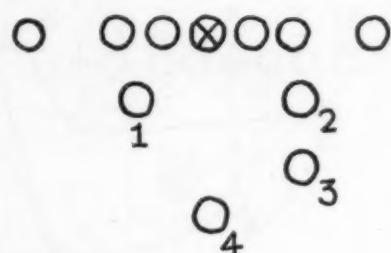
Noel Workman at Iowa State College has been using a modification of the double wing-back offense in which 4 lines up back of center and on some plays fades back to the position indicated, thus developing either a deep or a close formation. This is shown in Diagram 46.

"Bo" McMillin at Kansas Agricultural College is using an interesting formation as outlined in Diagram 47. No. 1 is usually in motion. In Diagram 48, 4 lines up well back and out as indicated. No. 1 may make a backward pass to 4 for a run or a forward pass, or 1 may pass forward to

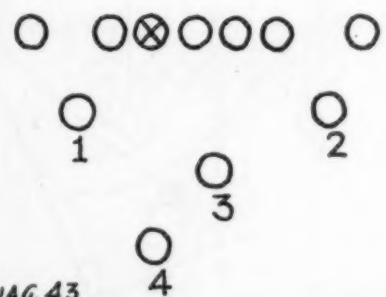




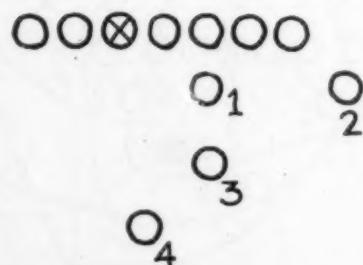
DIAG. 41



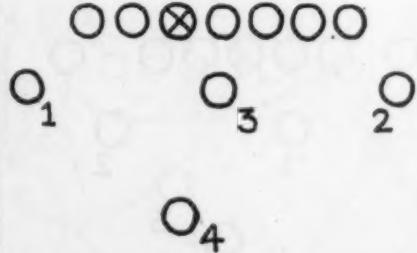
DIAG. 42



DIAG. 43



DIAG. 44



DIAG. 45

3 or to one of the other eligible men. This is also a strong lateral pass play.

At the University of Missouri, Gwinn Henry is using the formation indicated in Diagram 49 with the ends out, one wing-back and a modified tandem in the backfield. No. 4 may play close or back, thus making a line attack or forward pass formation of considerable strength.

At Creighton University, the Notre Dame system is in vogue with a backfield shift, while Oklahoma A. & M. is using the double wing-back and punt formations effectively.

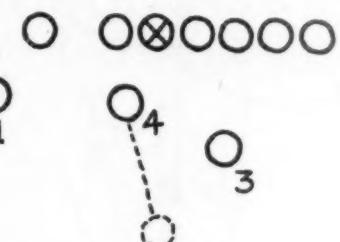
The Middle West

The following types of offensive play have been used by Middle Western teams during the 1930 season.

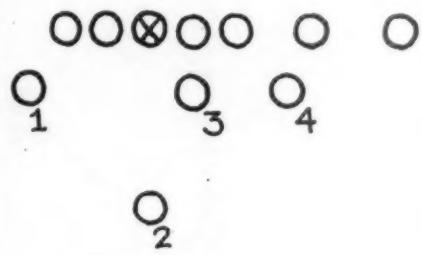
Diagram No. 50 shows the Purdue University fundamental formation with the balanced line, ends split away about two yards, and with a four spot formation of backs. A very effective strong side fake spinner is used from this formation. The ball is passed from center to the No. 2 back, who fakes a spinner to the No. 1 back, then hits back through the strong side just outside of his own offensive tackle. The No. 4 back goes out for the end, the No. 3 back helps the offensive end take the defensive tackle out, and the weak side guard swings out and leads the play through the hole. This has proven to be a very strong play.

Diagram No. 51 shows a wide end run from the same formation as shown in diagram 50. On this play, the ball is passed to the No. 1 back; the No. 2 back goes straight to the side wide, then comes back and swipes the defensive end from the outside, turning the end in. The No. 3 back, or quarterback, swings deep and leads the interference for the No. 1 back. The No. 4 back and the strong side guard swing through the hole just outside the offensive end and pick off the defensive back and the defensive fullback. The weak side end and tackle also cut through for the secondary. This play is particularly adapted to speed in the backfield.

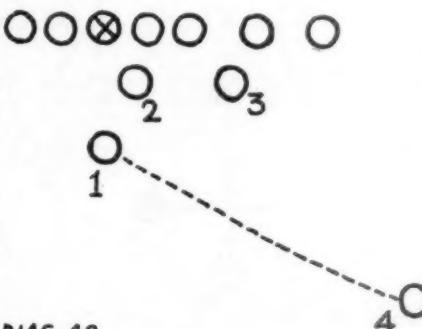
Diagram 52 shows Purdue's most effective forward pass. This pass is made from the same formation as shown in diagrams No. 50 and 51. The pass is from 35 to 40 yards, is a spot pass, and is taken by the receiver at full speed. The ball is passed from center to the No. 1 back, who may pass to either end or the wing-back, who swings down the middle and over to the left. The ends go down deep and hook out to draw the defensive backs out. The No. 4 back swings out and down the middle and, as a rule, across to his left in order to avoid the safety whose position may be slightly



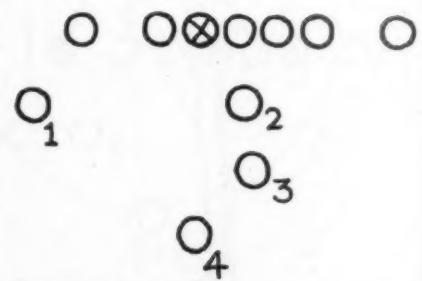
DIAG. 46



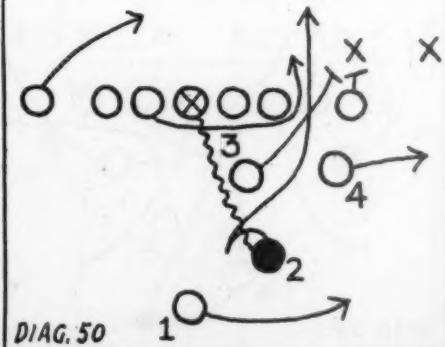
DIAG. 47



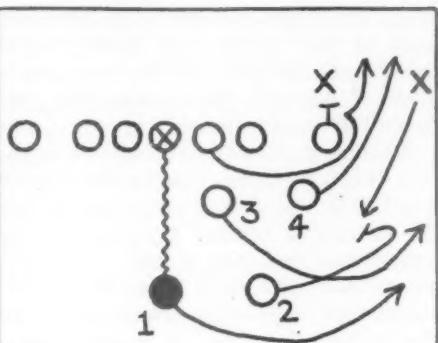
DIAG. 48



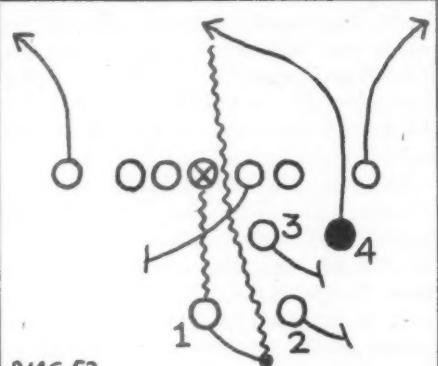
DIAG. 49



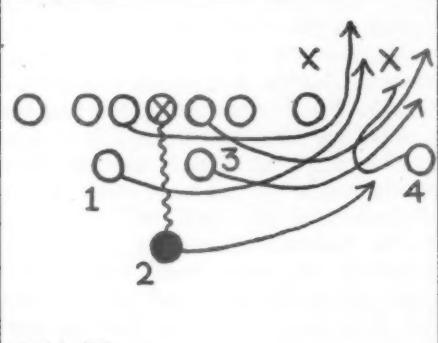
DIAG. 50



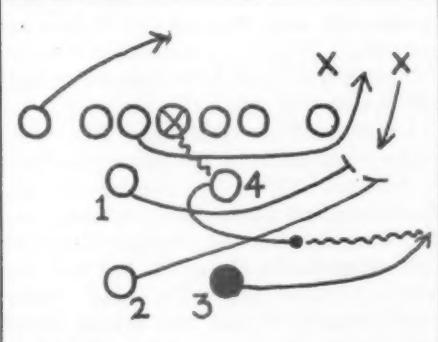
DIAG. 51



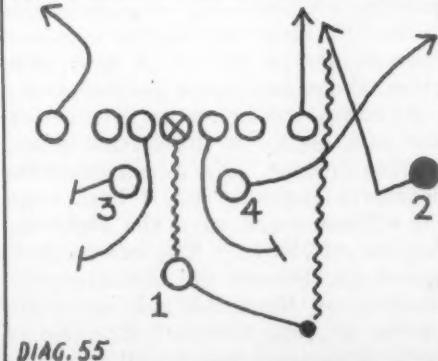
DIAG. 52



DIAG. 53



DIAG. 54



DIAG. 55

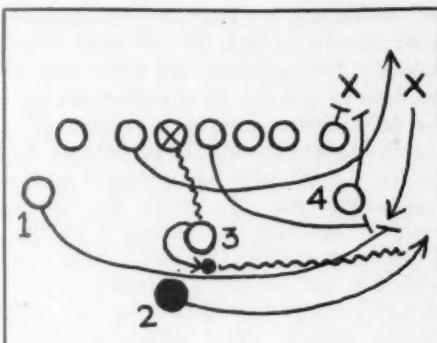
to the strong side. The No. 2 and No. 3 backs block as indicated, and the strong side guard drops back to the weak side to block.

Diagram No. 53 shows the University of Chicago flanker formation and a short end run where the No. 4 back or flanker, who is out about 25 yards, comes back in and drives back on the defensive end. The ball is passed from center to the No. 2 back, and the No. 3 back and the right offensive guard swing wide to lead the interference for No. 2, while the left offensive guard and the No. 1 back lead through the opening just outside the defensive tackle to block the defensive half and defensive fullback.

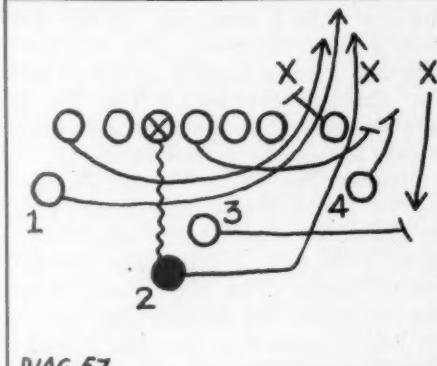
Diagram No. 54 shows the Chicago formation with a balanced line, and the box formation of backs back of center. A lateral pass play is shown from this formation with the pass from center going to the No. 4 back, who pivots to his left and fakes to give the ball to the No. 1 back, who swings across with the No. 2 back to take the defensive end. The No. 3 back has gone out straight to the right. The No. 4 back swings in behind backs No. 1 and No. 2, and makes an overhead lateral to No. 3, who has gone out beyond the defensive end position. The left offensive guard swings out close to the line of scrimmage and goes through for the defensive left half. The offensive left end goes across for the fullback.

Diagram No. 55 shows a forward pass from the Chicago flanker formation. The flanker from his position wide on the wing starts in motion diagonally backward toward his own backfield, then cuts sharply at an angle across and in behind the defensive tackle. The offensive right end goes straight down deep. The offensive left end starts in behind the defensive line; then hooks to the outside. The No. 4 back goes flat to the strong side. The No. 3 back blocks, and the two guards also drop out and block for the passer. The No. 1 back slides back as he receives the ball from center, and passes either to the flanker No. 2 or to back No. 4.

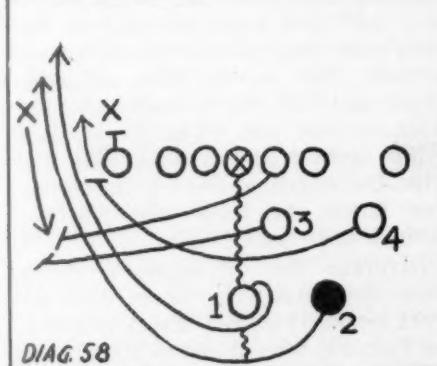
Diagram No. 56 shows the University of Iowa double wing-back formation with an unbalanced line and the ends slightly loose. Backs No. 1 and 4 sit one yard back and just outside their respective ends. The No. 3 back is about three yards back of the strong side guard, while No. 2 back is about four yards back of center. The play in the diagram shows a lateral pass to the strong side. The No. 4 back helps on the defensive tackle, the strong side guard comes out on the defensive end, the weak side guard swings around through the opening just outside of tackle and goes for



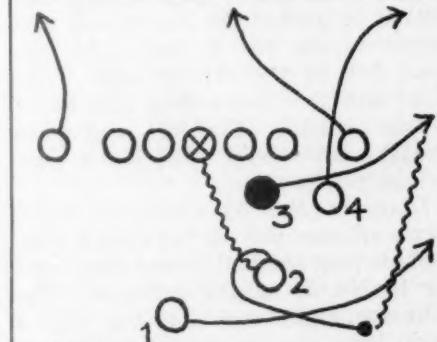
DIAG. 56



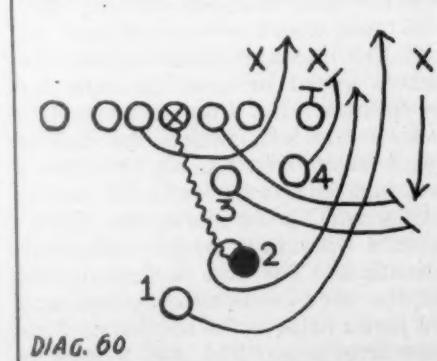
DIAG. 57



DIAG. 58



DIAG. 59



DIAG. 60

the secondary. The ball is passed from center to the No. 3 back, who makes a full pivot to his left, faking the ball to No. 1. No. 1 goes on for the defensive end. No. 3 follows No. 1 and makes an overhead lateral to the No. 2 back, who has gone out wide.

Diagram No. 57 shows the Iowa double wing-back formation with the No. 2 back taking the ball inside the defensive left tackle. On this play the offensive right end drives on the defensive guard. The offensive right guard and back No. 4, or the wing-back, take the defensive tackle out. The No. 3 back goes out for the defensive end; the weak side end and back No. 1 come around and lead the play through the hole. The No. 2 back starts to the right and cuts back quickly inside the defensive tackle.

Diagram No. 58 shows the University of Notre Dame formation with the balanced line, ends about two yards wide and a four spot formation of backs. The play shown from this formation is a spinner play where the ball is passed to the No. 1 back, who pivots all the way around to his right and gives the ball to the No. 2 back, and then leads the play to the weak side just outside the defensive tackle. The strong side offensive guard and the No. 3 back take the defensive end out. The No. 4 back swings across to the weak side and helps the offensive end on the defensive tackle, or leads the play on through with back No. 1.

Diagram No. 59 shows a Notre Dame forward pass where the ball from center is passed direct to No. 2, the fullback, who pivots to his left and fakes to the No. 1 back across, but follows in behind the No. 1 back and passes to the No. 3 back, who has gone flat to the strong side. The right end goes down deep and hooks to the outside; the left end goes straight down deep. The No. 4 back swings to the right.

Diagram No. 60 shows a Notre Dame spinner play to the strong side. On this play the ball passes from center to No. 2, or the fullback. The offensive right end and the No. 4 back turn the defensive tackle in; the strong side guard and the No. 3 back take the defensive end out. The weak side guard swings around behind the line and helps on the defensive guard or goes through for the fullback. No. 2 makes a complete pivot to his left, faking the ball to No. 1 back, and follows the No. 1 back just outside the defensive tackle.

Diagram No. 61 shows the Northwestern University double wing-back formation. The line is unbalanced and the wing-backs sit one yard back and just a little to the outside of their respective ends. The No. 3 back is

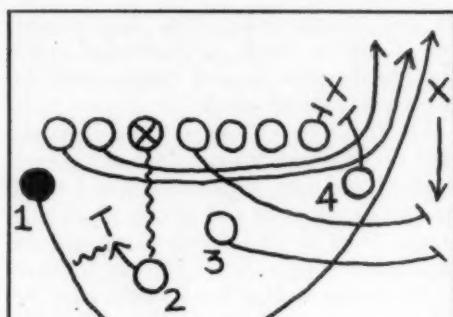
about two and one-half yards directly back of the strong side guard, while the No. 2 back is about four yards back of center. Of course this distance will vary.

The play shown from this formation is a short end run to the strong side. The No. 4 back helps the end on the defensive tackle; the strong side guard and the No. 3 back take the defensive end out. The weak side guard and end swing around and lead the play. The ball is passed from center to No. 2 back, who takes one step toward the weak side and gives the ball to the No. 1 back. No. 2 then pivots and throws his back into the defensive linemen who are charging through. No. 1 takes the ball for a short end run inside the defensive end.

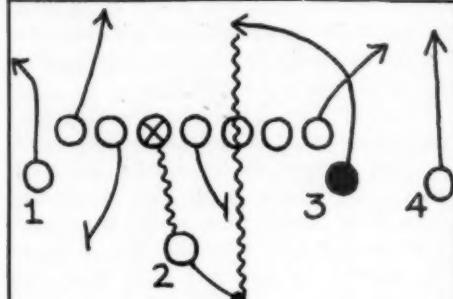
Diagram No. 62 shows an effective forward pass from the Northwestern double wing-back formation where the No. 4 back has gone out wide on the wing to his right. The guards drop back to protect the passer, and the passer gives ground as he receives the ball and may pass to any eligible man. In this instance the ball is passed to the No. 3 back.

Diagram No. 63 shows the Northwestern double wing-back formation and the No. 2 back taking the ball for a drive off the defensive left tackle. In this play the ball is passed from center to the No. 2 back, who starts off tackle to his right with the ball in his outside arm. He slides the ball and his arms back and to his right as if to give the ball to the No. 4 back on a reverse, but he continues on and hits just off the defensive tackle. The strong side guard comes out and checks the defensive end out. The No. 3 back fakes to the left, and the weak side guard and end cut across for the fullback.

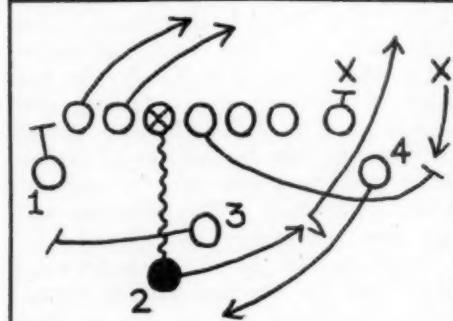
Diagram No. 64 shows the Ohio State University double wing-back formation, which is similar to the Northwestern formation shown under diagram No. 61, except that the two wing-backs face in toward the center of the line. The play shown from this formation is a strong short end run to the weak side. This is a power play with the interference massing on the weak side defensive tackle. On this play the ball is passed from center to the No. 2 back, who takes about two steps to the strong side, passes the ball to the No. 4 back, and then blocks off the defensive men coming through. No. 3 back takes the defensive end out; No. 1 back helps the offensive end turn the right defensive tackle in. The strong side guard, tackle, and end lead the play, massing on the weak side defensive tackle, or just outside. The No. 4 back carries the ball on this reverse



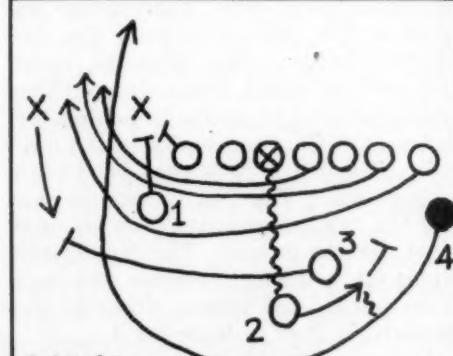
DIAG. 61



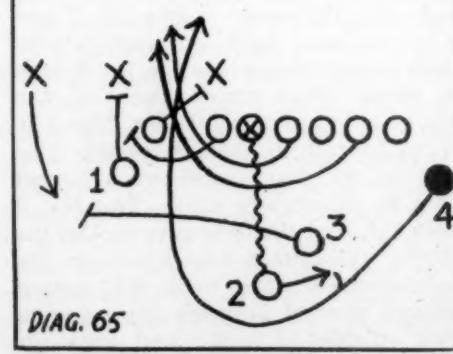
DIAG. 62



DIAG. 63



DIAG. 64



DIAG. 65

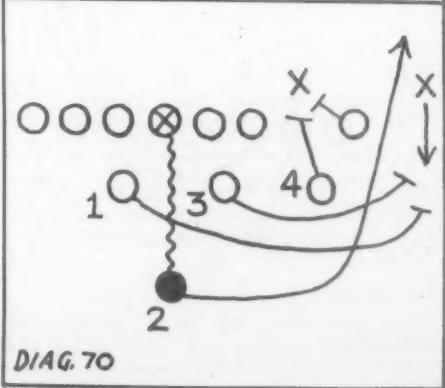
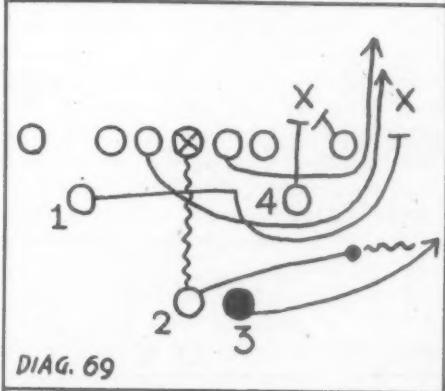
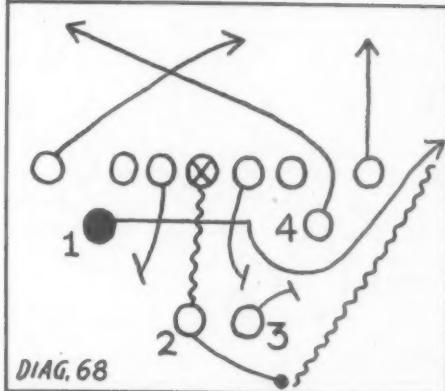
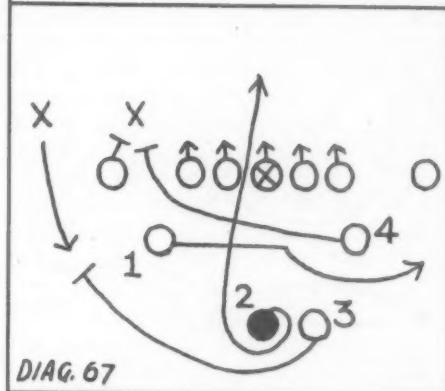
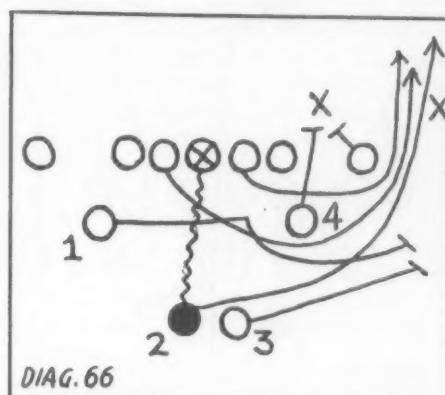
just outside the defensive short side tackle.

Diagram No. 65 shows the Ohio State formation with the No. 4 back taking the ball inside the weak side defensive tackle. On this play the ball is passed from center to the No. 2 back, who takes a step forward, pivots, and gives the ball to the No. 4 back. The No. 3 back takes the defensive end out. The weak end cross-blocks on the weak side defensive guard. The weak side defensive tackle charges through and is taken out by the weak side offensive guard and the No. 1 back. The strong side guard and the outside strong side tackle swing around close and lead the play inside the weak side defensive tackle. The No. 4 back swings close and carries the ball inside the weak side defensive tackle as indicated.

Diagram No. 66 shows the University of Minnesota offensive formation with a balanced line, the ends out three yards from their tackles and the backs No. 1 and No. 4 taking a position one yard back of the line and just to the outside of their respective tackles. The No. 2 and No. 3 backs take a position side by side and parallel to the line, four to four and one-half yards back of the line of scrimmage. A play from this formation shows the No. 2 back taking the ball for a short end run inside the defensive end. The No. 1 back is in motion before the ball is passed from center, but just as the No. 1 back passes center he hooks a little toward his own end line and the ball is snapped. This gives time for the defensive end to come in; then the No. 1 and No. 3 backs take the defensive end out. The No. 4 back helps the offensive end take the defensive tackle in. The guards swing out and lead the play through the hole to take care of the secondary. No. 2 carries the ball as indicated.

Diagram No. 67 shows a Minnesota spinner play to the center of the line. The No. 1 back is in motion to his right. The ball is snapped to the No. 2 back, who makes a complete pivot to his right, faking to give the ball to the No. 3 back. The No. 3 back swings to the left, faking that he has the ball, but blocks the defensive end. The No. 4 back crosses over and helps the offensive end block the defensive right tackle out. The offensive right end blocks the defensive left tackle. The five center men drive straight ahead in wedge formation. No. 2, after his pivot, drives straight in on center.

Diagram No. 68 shows a forward pass from the Minnesota formation. The right end goes straight down deep. The No. 4 back goes down and



diagonally across deep to his left. The left end goes down and slightly to the right to cover the center of the field. The No. 1 back is in motion to his right, and goes on out flat to the right and receives a pass from the No. 2 back. The No. 3 back blocks, and the two guards come back and block for the passer.

Diagram No. 69 shows a lateral pass from the Minnesota formation. The No. 1 back is in motion to his right, and, just as he crosses the zone back of the offensive center, he hooks back toward his end line, fairly deep and wide; then drives back on the defensive end. The No. 4 back helps the end on the defensive tackle. The two guards swing out to the right, which gives the play all the semblance of a short end run. The ball is passed from center to the No. 2 back. The No. 3 back leads the play to his right and goes out beyond the defensive end. The No. 2 back follows and makes an overhead lateral to No. 3 as indicated.

Diagram No. 70 shows a short end run from the University of Michigan close kick formation. On this play the right end is four yards out from his tackle. The No. 4 back takes a position one yard back of the line and one yard inside the end, who is split away. The No. 3 back takes a position one yard back of the groove between the offensive right guard and right tackle. The No. 1 back takes his position one yard back of the weak side guard. The No. 2 back is five yards directly back of center. In this play the right end and the No. 4 back take the defensive tackle in. Backs Nos. 3 and 1 take the defensive end out. The weak side guard swings out to the right and leads the play through the hole. (Not indicated in diagram.) The center passes the ball to the No. 2 back, who makes a short end run inside the defensive end as indicated.

Diagram No. 71 shows a forward pass from a Michigan pass and kick formation. On this play the right end is split away four yards from his tackle; the No. 4 back is one yard back of the line and about two yards outside of the end that is split away. The No. 3 back takes his position one yard back of the line and in the opening between the wide end and the tackle. The No. 2 back is a yard back of the line and in the seam between the right guard and the right tackle. The No. 1 back is seven yards directly back of center. The ball is passed from center to the No. 1 back. The No. 2 back and the two guards drop back and block. The two ends and backs Nos. 3 and 4 go down as indicated. No. 1 gives ground and

passes to the right end or to any point open.

Glenn Thistlethwaite is using the double wing-back formation for the second year very effectively behind a powerful line. Being blessed with a good line plunger, his line attack is stronger than is usually the case where the double wing-back offense is employed. With the double wing-back formation, spinners, reverses, runs to the strong side and runs back on the weak side, in which the runner is preceded by linemen and backs, are used. The usual forward pass formations are employed very effectively. A lateral pass on the wide sweeping end run, in which the ball carrier makes a basketball pass over the head of the incoming defensive end, is sometimes used.

The Wisconsin play in Diagram 72 shows back No. 4 in motion; 3 gets the ball from center and passes to 4, who in turn passes to 2 for a run around the left end. The right guard and right tackle are in the interference with the No. 1 back and the left end blocking the opposing right tackle.

In the Wisconsin play illustrated in Diagram 73, back No. 1 is in motion; 2 fakes to give the ball to 1, reverses and drives through the strong side, preceded by the left guard; No. 4 helps on the opposing tackle or end, or leads the interference behind the defensive line; 3 blocks off the opposing left end.

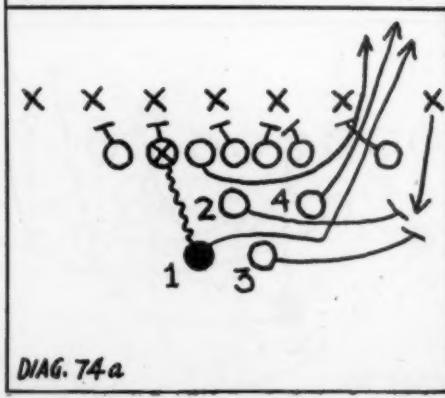
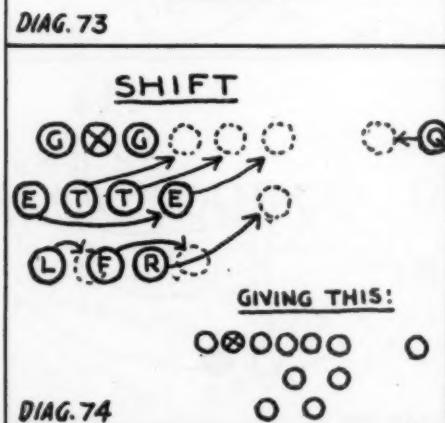
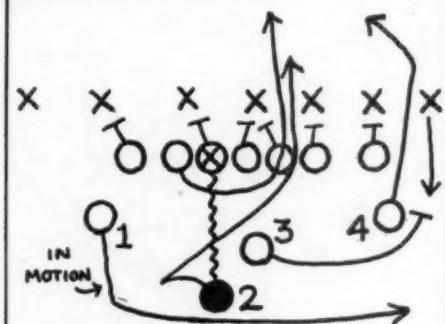
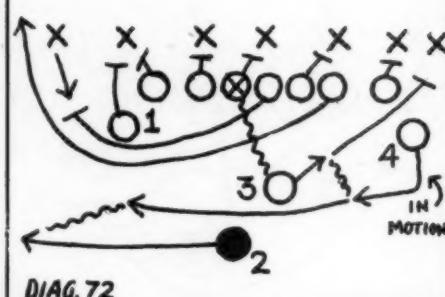
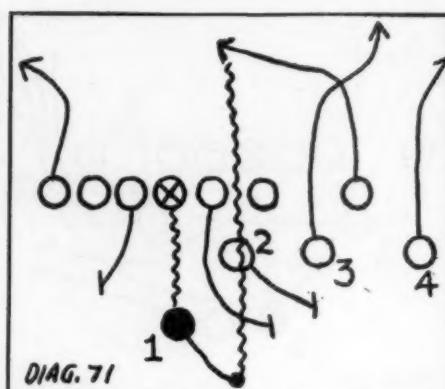
The Indiana University shift is illustrated in Diagram 74.

Diagram 74a shows a slant with a cut-back outside of tackle. No. 2 and No. 3 block off the opposing end. No. 4 and a guard lead the interference, and No. 1 starts to the right and then cuts back inside of end.

The University of Illinois has, for the most part, discarded the double wing-back formation, and among other formations is using the one illustrated in Diagram 75. In this play, No. 1 receives the ball from center, runs to the right and passes back to 4, who runs to the left with 2 and 3 and a strong side lineman running interference.

The South

Tulane University, 1929 Southern Conference Champions, and coached by Bernie Bierman, a halfback at Minnesota under Dr. H. L. Williams, uses a modified huddle at all times. The players line up, with the linemen having their backs to the ball about three or four yards away, and with the backfield man facing the ball. In breaking from the huddle, the ends and center start first and then the rest follow on signal, the linemen pivoting towards the center and stepping into



position in a two or three count, the backs simultaneously, also, assuming their positions.

After the huddle, Tulane ordinarily shifts into an unbalanced line with a Z type of backfield formation, as in Diagram 76. This formation is used both left and right. The guard is always the lineman over.

From this formation, shown in Diagram 76, a great variety of plays is used, practically all starting with direct passes from the center to the ball carrier. The back No. 1 may run around end, off tackle, or cut back inside defensive tackle on the long side; or he may run off the short side, usually inside the defensive tackle after starting as if to go outside. He may also start off tackle on the long side and hand the ball to No. 4 for a criss-cross, or fake handing it to No. 4 and keep the ball. From this formation, also, No. 1 may execute a number of forward passes. When short gains are desired, or when the defense is too loose, the center may pass the ball to No. 2, who bucks into the line at any point inside the defensive tackles.

Loyola of the South depends upon an unbalanced line and Z type of backfield formation to a large extent, but also usually deploys a man out either to the long or short side several yards. This man is used either to go down the field to catch passes, to box in the defensive end, or to cut down defensive backs. He may be a back or an end, and he may be on the end of the line or a yard back.

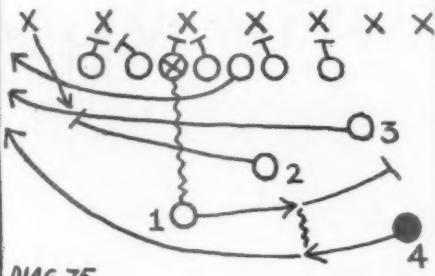
Loyola uses a preliminary formation but no huddle. The quarter calls signals aloud, and the team shifts into one or the other of the formations shown in 77 and 77a in a count of two or sometimes three. The preliminary formation is shown in Diagram 78. The backfield men arrange their positions after hearing the signal but before the signal to shift.

The end run shown in Diagram 77b is a feature of Loyola's play and is developed from the formation shown in Diagram 77.

Loyola also sometimes uses the formation shown in Diagram 79. The favorite play from this formation is the off-tackle play shown in Diagram 80, although line smashes, end runs, reverses, and passes are also used.

Oglethorpe University of Atlanta, Georgia, is coached by Harry Robertson, the former Syracuse University center. He is a firm believer in the advantages of the double wing-back formation with a man in motion.

Oglethorpe uses a modified huddle at all times, linemen with their backs to the ball grouped in semi-circular



DIAG. 75

arrangement about the center, who is about three yards from the ball. When the players are to be changed from one position to another, such changes are made in this huddle. The backfield faces the linemen. Upon a given signal the whole line pivots either left or right, and the men jump into their positions on a count of two, the backfield at the same time assuming their positions. Both balanced and unbalanced lines are used by Oglethorpe, the unbalanced being favored.

The formation shown in Diagram 81 is used both left and right, and plays follow with either No. 1 or No. 4 back in motion. The ball is usually passed to No. 3, who makes a half or full spin, handing the ball to No. 1 or No. 4, who has started in motion, or No. 3 fakes handing, and keeps the ball. Triple passes are also used. The favorite play is inside tackle, shown in Diagram 81a.

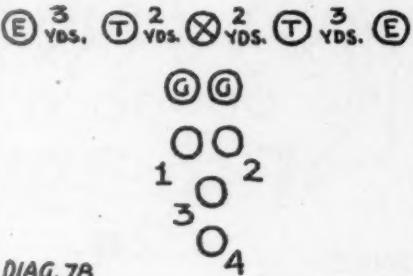
In this play, the ball is passed to No. 2, who fakes to hand it to No. 1 but swings and bucks off defensive left guard, the right guard and No. 3 preceding him through the hole. No. 4 blocks off the opposing left end with the aid of No. 1, and the two men on the left side of the line cut for the secondary.

A number of Southern teams are now using the familiar Notre Dame style of play, and judging from the results achieved are eminently successful. Probably the leaders in this style of play are Georgia, coached by Harry Mehre, former Notre Dame center; North Carolina, coached by "Chuck" Collins; Florida, coached by Charles Bachman; Rice Institute; and Auburn. Rice is coached by Jack Meagher. Auburn is depending upon a trio of Notre Dame men to revive her football prestige. Judging from the way Auburn has developed recently, they bid fair to succeed. This coaching staff is headed by Chet Wynne, who coached at Creighton University for a number of years, and his assistants are Roger Kiley, formerly head coach at Loyola of Chicago, and Jack Cannon, a lineman from last year's famous and undefeated Notre Dame eleven.

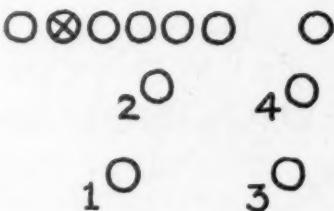
All of the teams are using the same type of formations, shifts and plays that have made Notre Dame football a great favorite among coaches and fans throughout the country.

This year, it seems, short side plays are having an important part in this offense, whereas, in the past, long side plays were depended upon largely.

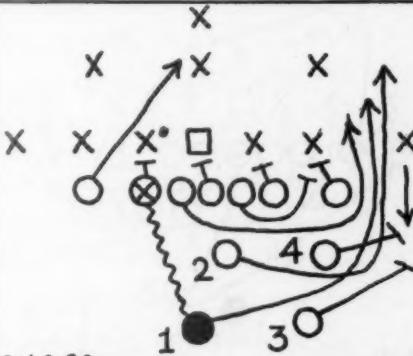
In Diagram 82, No. 1 receives the ball from center and fakes a run to the long side but hands the ball to



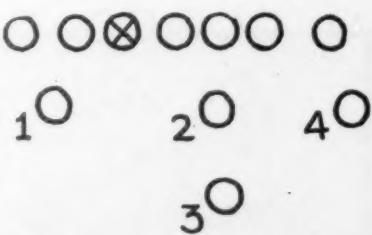
DIAG. 78



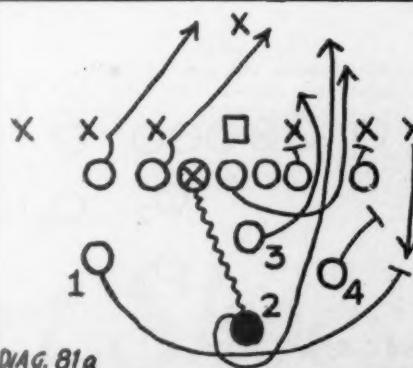
DIAG. 79



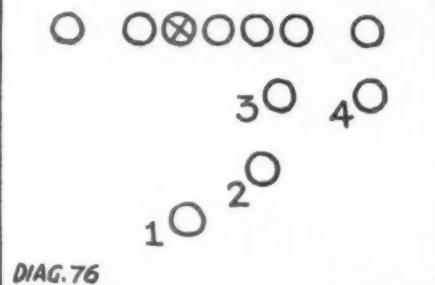
DIAG. 80



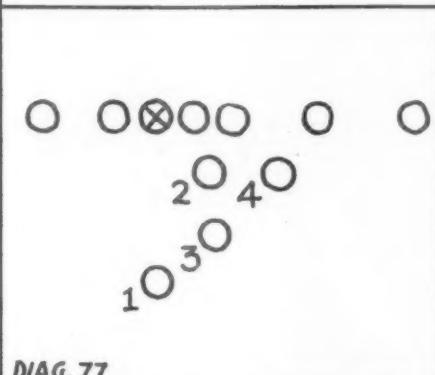
DIAG. 81



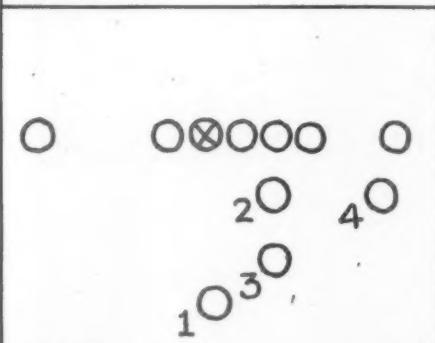
DIAG. 81a



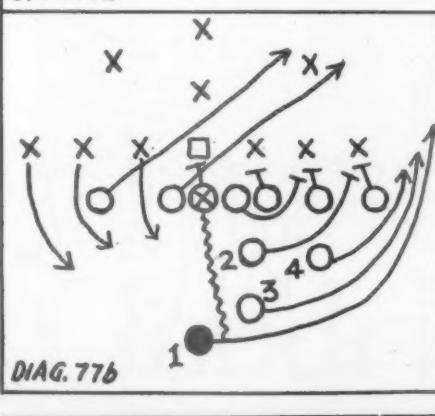
DIAG. 76



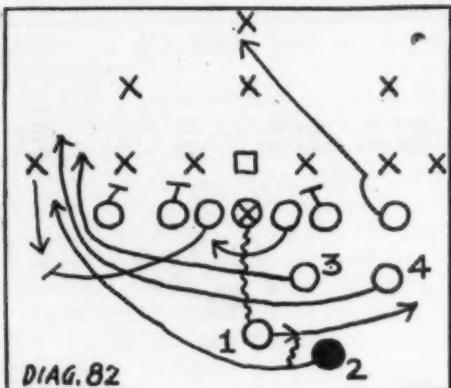
DIAG. 77



DIAG. 77a



DIAG. 77b



No. 2, who goes outside defensive tackle. This is not like the old criss-cross play where one player advanced several steps towards his partner in the play before handing the ball to him, but the change is made very quickly. This play goes outside defensive tackle.

In Diagram 83, No. 1 fakes to No. 3, who continues on as if having the ball and blocks out the defensive end. The guard blocks out the defensive tackle, and No. 1 spins around and follows No. 2 through between the defensive guard and tackle. The left end allows the defensive tackle to come through and cuts the defensive fullback.

In Diagram 84, No. 3 receives the ball from the center and, turning towards No. 1, gives him the ball and then continues over to the short side to receive the pass. No. 4 checks the defensive left end and ducks in behind for a pass. No. 2 and the left guard block for the passer.

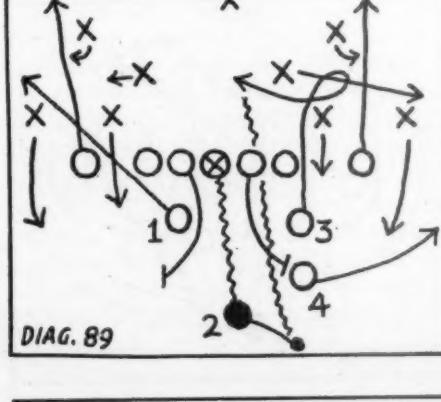
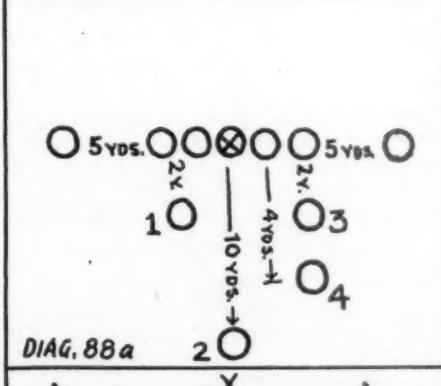
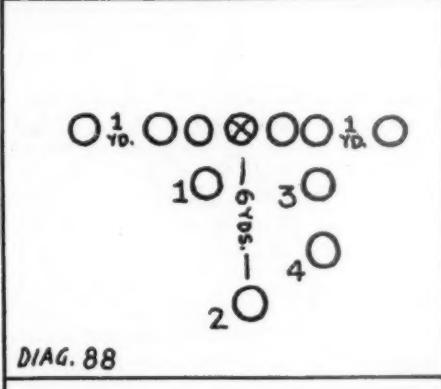
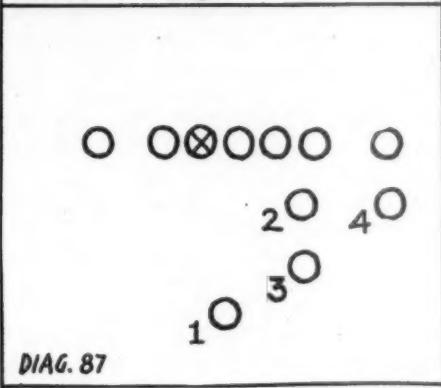
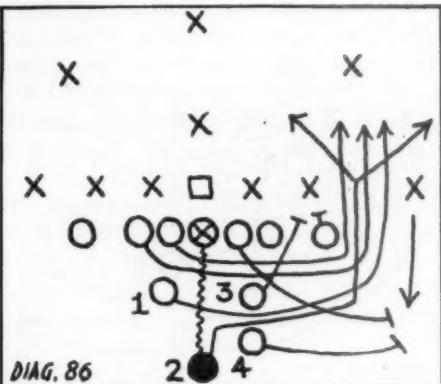
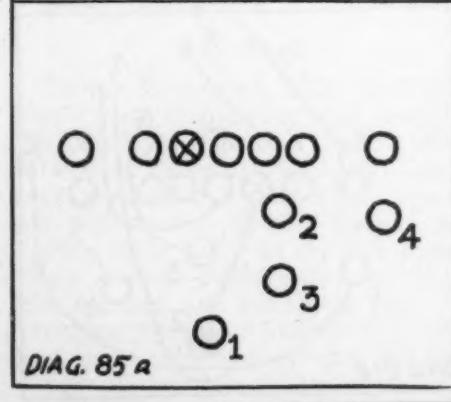
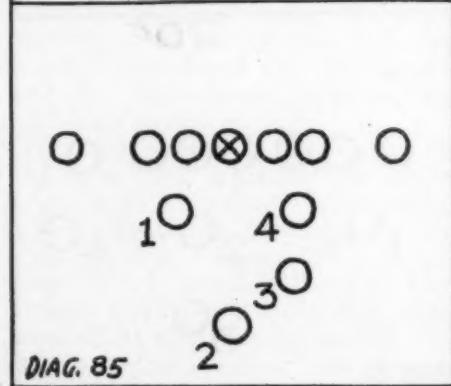
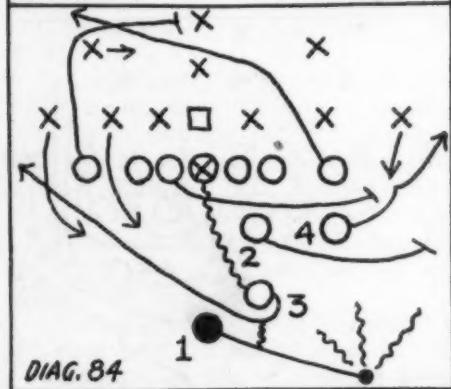
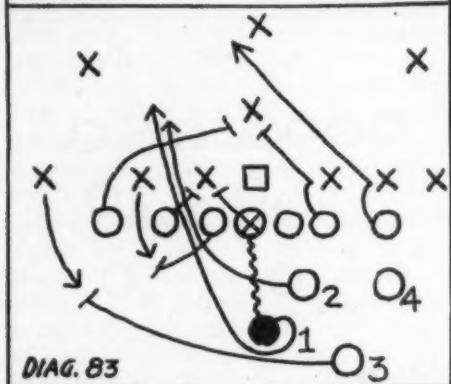
The University of Alabama will be coached this year for the last time by Wallace Wade, who played at tackle for Brown University. Wade is a firm believer in the advantages of the balanced line with semi-punt formation in the backfield, as shown in Diagram 85, but he sometimes uses the unbalanced line and Z type of backfield formation illustrated by Diagram 85a.

Hard driving plays are used as the principal offensive weapons, in which blocking is especially stressed, although forward passing also comes in for a good share of attention.

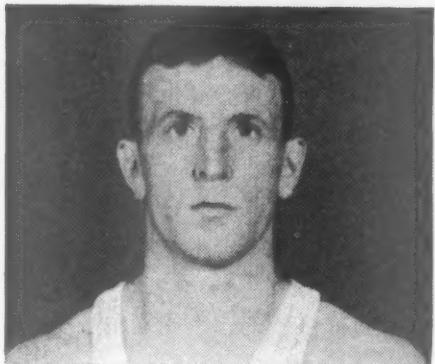
Probably his favorite play is an off-tackle play from punt formation in which the kicker and runner No. 2 plays about nine yards back, advancing forward to meet the ball to a point about six or seven yards back and cutting behind his interference as indicated in Diagram 86. This play is extremely powerful and when executed by the perfect blocking that Alabama uses is a consistent ground gainer.

This year, Coach Alexander of Georgia Tech is getting away from the peculiar backfield formation he used last year in which the quarter stood back to back with the center, taking the ball from the center on most plays and tossing it to his backs. He is using a Z type of formation in the backfield with usually an unbalanced line (Diagram 87).

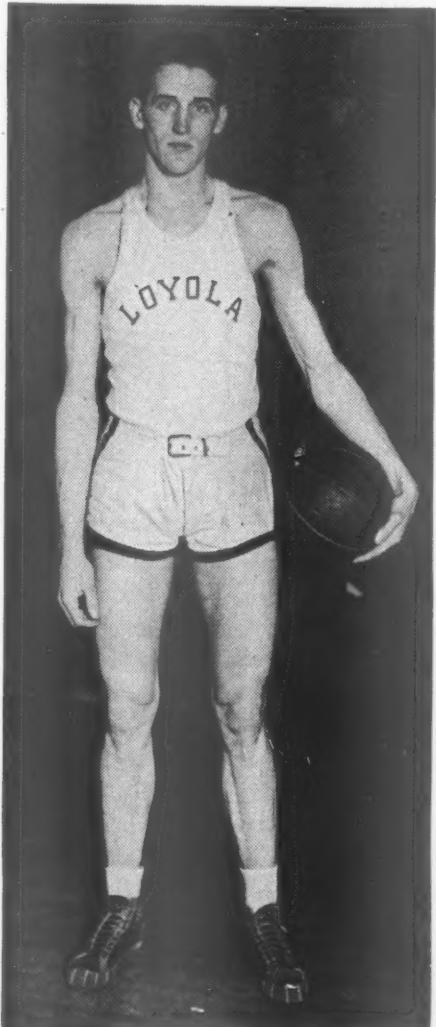
Ed Walker, formerly with "Pop" Warner's Stanford team, is the new coach at the University of Mississippi and is using the famous double wing-back formation which so many admirers of "Pop" Warner's football are



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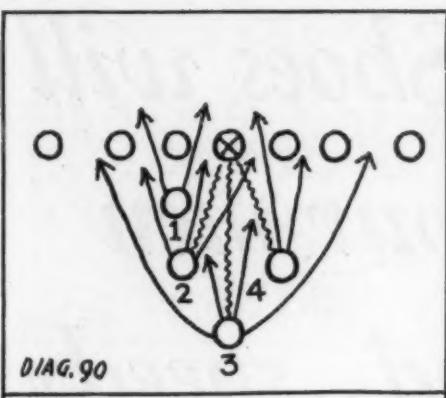
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Vanderbilt University surprised everybody by her easy victory over Minnesota early this year. Dan McGugin, who is by many years the oldest coach in the Southern Conference, uses a versatile attack built upon close-up and regular punt formations from which end runs, off-tackle plays, line bucks and forward passes are used very skilfully (Diagrams 88 and 88a).

Tricky delayed forward passes are Vanderbilt's best weapons, but her running and plunging attack is also so strong that no opponent can afford to overemphasize the pass defense. Vanderbilt uses an off-tackle play similar to the one used by Alabama as illustrated in Diagram 86.

One of Vanderbilt's favorite passes is as shown in Diagram 89. The passer is protected by the guards, and No. 3 starts out and pivots around to receive the pass over center. The passer fades away and picks out the open man, who may be the end, or backs 1 or 4, if 3 is covered.

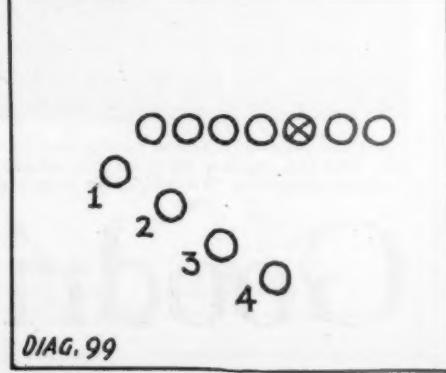
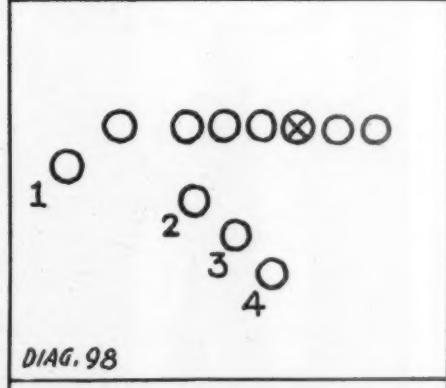
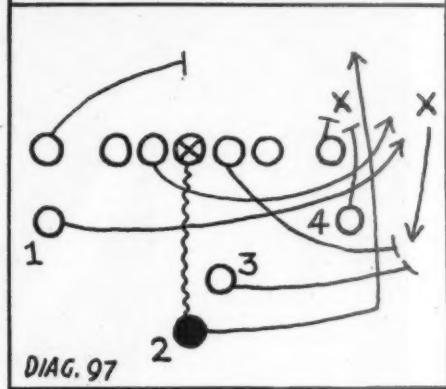
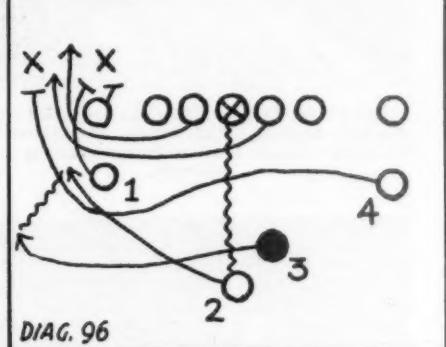
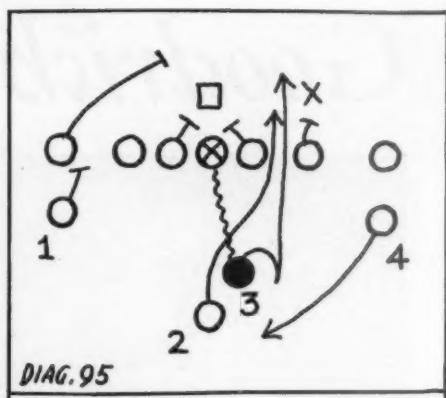
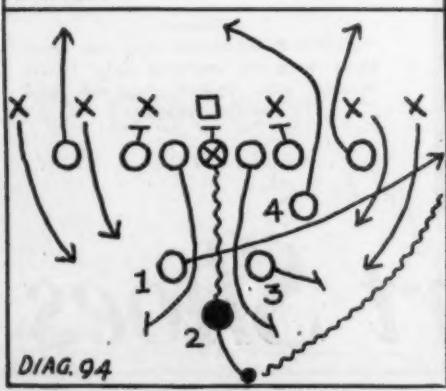
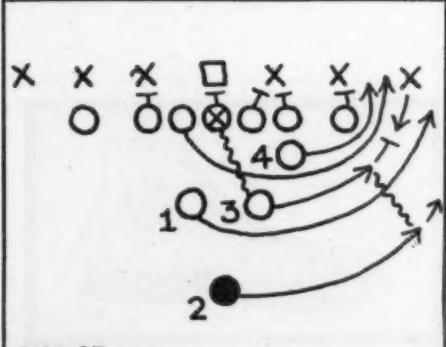
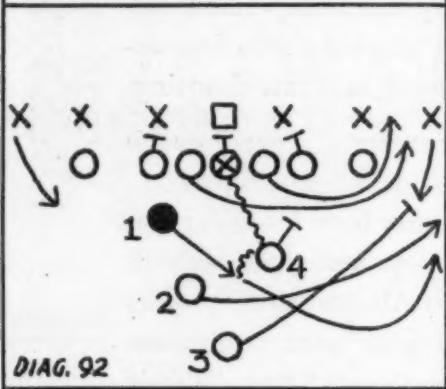
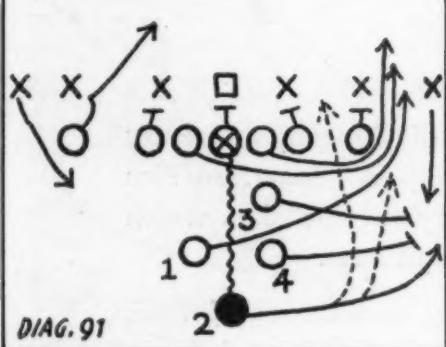
In Diagram 90 is illustrated Vanderbilt's modified punt formation with a balanced line. The quarterback, No. 1, lines up behind one of the guards. Backs 2 and 4 are about three and one-half yards back of the line, and the fullback is from four to five yards back of center. In this diagram is shown the manner in which bucks by each of the four backs and off-tackle slants by the fullback are executed. With a powerful line attack, the opponent, it may be assumed, will be forced to use the seven-man line of defense.

Diagram No. 91 illustrates a Vanderbilt off-tackle run or a cut-back when the tandem is formed on the right side. Both guards come out in the interference.

Diagram 92 illustrates a Vanderbilt sweeping end run play in which 4 receives the ball from center, passes back to 1 and then protects to the right. No. 3 blocks the opposing left end, and No. 2 and the guards form the interference.

Diagram 93 shows the manner in which the Vanderbilt lateral pass is made. No. 3 receives the ball from center, runs to the right, makes a backward pass to 2 and then blocks the end. The left guard and backs 4 and 1 form the interference to the right. No. 2 may either carry the ball wide or cut back.

The long forward pass play used by Vanderbilt is illustrated in Diagram 94. The ball is passed direct to 2, who steps back for a pass to either end, to 4 over the line, or to 1 in the





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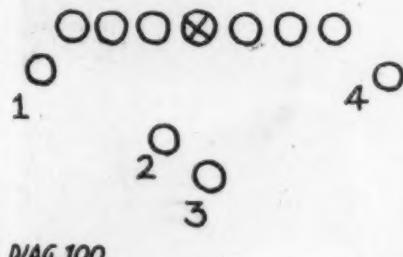
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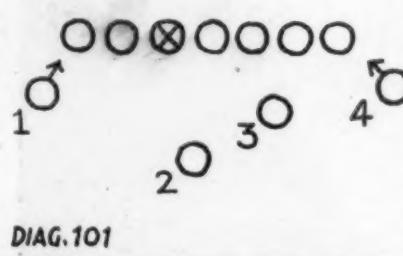
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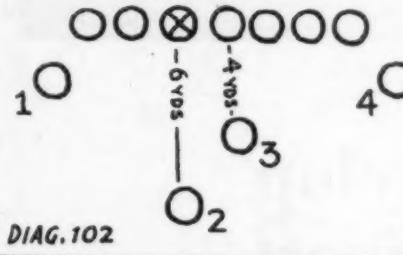
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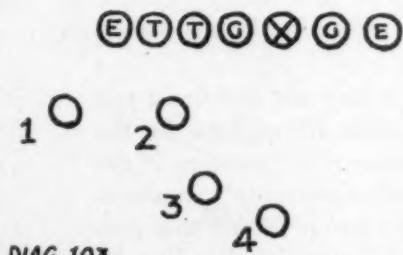
DIAG. 100



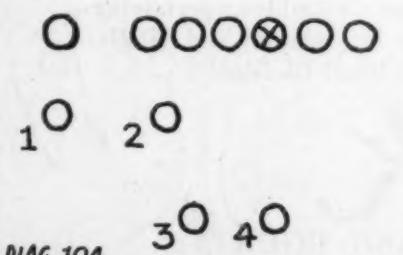
DIAG. 101



DIAG. 102



DIAG. 103



DIAG. 104

flat zone. The guards and No. 3 protect the passer.

The East

Diagram No. 95 shows the University of Pennsylvania formation with balanced line, ends slightly loose, and a double wing-back formation of backs. On this play, the No. 3 back receives the ball from center, makes a fake one-half spinner to the No. 4 back, and then hits straight ahead through the line between the guard and tackle, with the No. 2 back leading the play.

Diagram No. 96 shows the Pennsylvania lateral pass. On this play, the No. 4 back is in motion laterally to his left before the ball is passed; he hooks out and drives back on the defensive end. The two offensive guards swing out and lead the play close on the defensive tackle. The center passes the ball to No. 2 back, and the No. 3 back goes out wide to the left. No. 2 starts with the ball the same as in a mass play on tackle; then he makes an overhand lateral out to No. 3.

Diagram 97 shows the University of Pennsylvania play where the No. 2 back takes the ball inside the defensive end. The No. 4 back helps on the defensive tackle; the right guard and the No. 3 back take the defensive end out. The left guard and the No. 1 back lead the play just outside the defensive tackle. No. 2 carries the ball as indicated.

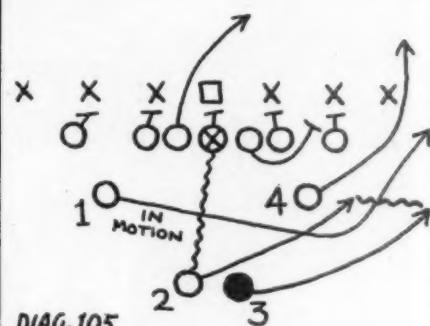
Bob Higgins of Penn State has been using a tandem with a single wing-back. The tandem is usually set behind the strong side of an unbalanced line with the strong side end loose. This is a strong formation for line drives, end runs on the strong side and short passes over the line (see Diagram 98).

Bucknell University is using a formation this year quite similar to the Penn State formation. The end on the strong side may be either in or out. Backs 2, 3 and 4 form a tandem behind the wing-back No. 1, as shown in Diagram 99.

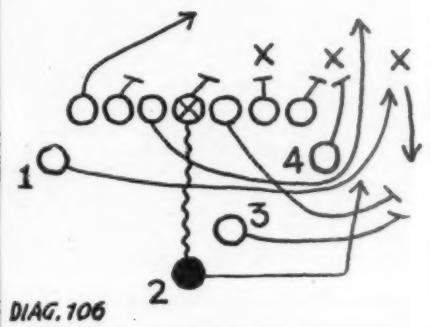
Bucknell is also using the double wing-back offense behind a balanced line as shown in Diagram 100.

Colgate University, coached by Andy Kerr, has one of the strongest teams in the East. Diagram 101 illustrates one Colgate formation. The wing-backs, 1 and 4, face slightly in and are stationed about one and one-half yards back of the line of scrimmage and to the outside. The fullback is four yards back of center. The ends may play loose, but generally they play in.

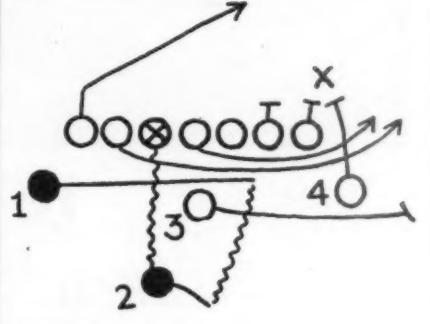
In the formation illustrated by Dia-



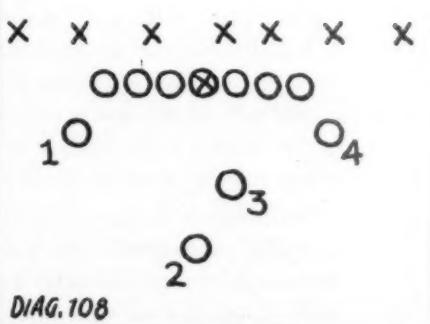
DIAG. 105



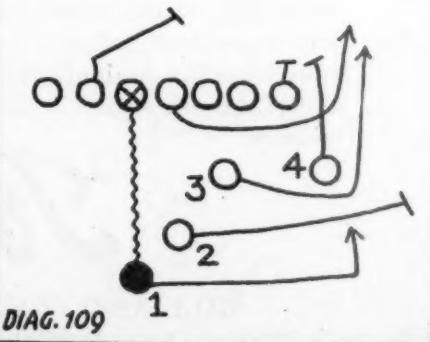
DIAG. 106



DIAG. 107



DIAG. 108



DIAG. 109

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gram 102, the Colgate wing-backs are stationed as in the other formation, with the quarterback, No. 3, four yards behind the guard. The fullback, No. 2, is six yards behind center. This is a strong formation for runs and passes, with spinners and reverses and now and then a back in motion.

Syracuse University comes out of the huddle as in Diagram 103, with a single wing-back out and the ends playing in; or the players may form as illustrated in Diagram 104.

Harvard's lateral pass is illustrated in Diagram 105. No. 1 is in motion when the ball is snapped to No. 2, who runs forward and to the side and passes laterally to No. 3. Nos. 1 and 4 interfere. The left guard blocks the defensive fullback and the right guard helps cross-block the defensive left tackle. The No. 2 back usually lines up from four to five yards back of center. Backs 1 and 4 are behind the openings left between the ends and tackles.

Diagram 106 illustrates a Dartmouth off-tackle play which may also be used as a cut-back through tackle or guard. The two guards with backs 1 and 3 form the interference. No. 4 helps the right end on the opposing tackle. The left end blocks the secondary.

Diagram 107 illustrates the Army's short pass behind the line. No. 2, who is four yards behind the center, steps back, raises the ball high over his head, fakes a long pass to the left end and then passes to the wing-back, No. 1, behind the line as indicated. No. 3 blocks the opposing left end out; 4 helps on the tackle. The two guards run interference.

Diagram 108 illustrates one of Jock Sutherland's University of Pittsburgh formations. The No. 2 back is from five to six yards back, and the No. 3 back is in a position to get the ball from center for spinners or reverses.

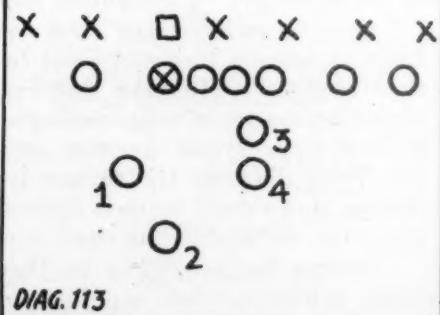
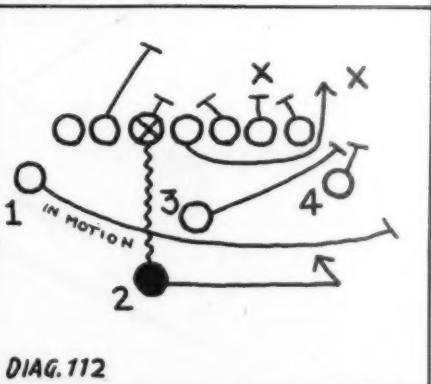
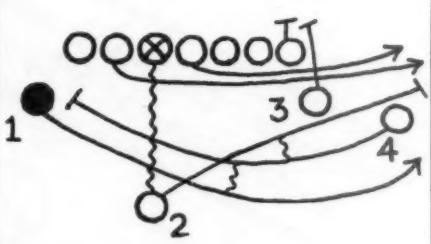
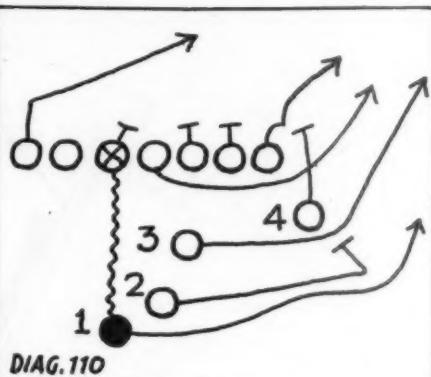
Diagram No. 109 shows Gil Dobie's off-tackle play. No. 1, who is five yards back of center, starts to the right and cuts back over tackle, following 3, 4 and the right guard, who compose his interference. No. 2 turns the left end out, and the left guard goes through the line for the secondary.

A New York University end run is illustrated in Diagram 110. No. 1 is five yards back of center. The strong side right guard and No. 3 form the interference to the right. Backs No. 2 and No. 4 block the opposing left tackle. The right end momentarily checks the tackle and then joins the guard and 3 in the interference.

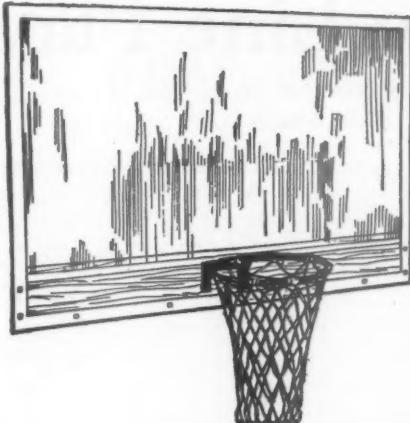
Brown University's double reverse is illustrated in Diagram 111. The

fullback, No. 2, is from three and one-half to four yards back of center. The ball is passed by 2 to 4 as the latter swings to the left. He, in turn, passes to 1, coming around to the right. The latter follows the interference given him by the two guards and No. 2.

Diagram 112 illustrates one of Princeton's cut-back plays. No. 1 is in motion when the ball is snapped to 2, who lines up five yards back of center. No. 2 starts to the right and



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cuts back, following the right guard and 3. Number 4 takes the tackle, and 1 blocks the opposing end.

Yale sometimes uses the peculiar "mouse trap" formation illustrated in Diagram No. 113. From this, the

opposing line is spread so as to make line drives possible. It also has considerable forward passing strength. Back No. 2 lines up four and one-half to five and one-half yards back of center.

Defensive Line Play

Line Coach, University of Minnesota
By E. E. Wieman

EACH of the various offensive formations used in football presents a somewhat different problem for the defense. The double wing-back formation, for example, is especially dangerous just inside and outside the defensive tackles. Some means must be found for reenforcing the defensive tackles if this formation is to be coped with successfully. Similarly, each formation has points of special strength. No formation, however, affords equal strength for all types of offense. The problem, then, in planning the defense is to analyze carefully the possibilities of the formation against which one is to defend.

After determining the points of strength and weakness in the opponents' formation, the defense should be planned to stop the stronger plays. To do this, it may be necessary to sacrifice strength elsewhere and, naturally, the sacrifice should be made where it would be least felt; that is, where the formation of the opponents affords the least strength. Stopping the stronger plays has a double advantage. Not only are the most dangerous plays of the opponents stopped but their confidence is apt to be broken so that even though they should later try other plays directed at the weak spots in the defense, the chances of success are small. They are pretty apt to reason that if their strong and favorite plays cannot be made to gain ground, then certainly these other plays cannot be successful. The result is a half-hearted effort and a defeated team.

As already stated, the double wing-back formation provides great strength in attacking the defensive tackles. If the formation is close, that is, with the rear man up within four or five yards of the line, the formation is also strong for bucks, reverses and spinners. However, with such a formation it can usually be assumed that the offense will be rather weak on wide plays (except certain reverses, in which there is always some delay), and on passes. In planning the defense, therefore, the line, especially the tackles, should be reenforced and in so reenforcing, it would be the part of wisdom, if necessary, to sacrifice a

part of the defensive strength against passes and wide runs. This would probably call for a 7-2-2 defense; that is, seven men in the line, a backfield man backing up each tackle and the other two backs somewhat deeper, forming the conventional box defense. It is admitted that such a defense is not quite so strong against forward passes and does not afford quite so much strength against wide end runs as do some of the other defenses. However, such a defense would be strong against those types of plays for which the offensive formation is best suited.

If there is a double wing-back formation with the rear man deeper, then strength for bucks is diminished and strength on passes and wide runs increased. The threat at the tackles remains approximately the same. It is now necessary to guard against passes, wide runs and tackle plays. Probably the best defense would be a 7-1-2-1. This places the backs in the most advantageous positions to stop wide plays and passes. If there is a good fullback backing up the line, the guards should be shifted wider than usual to reenforce the tackles, since the strongest point of attack in this formation is just inside and outside of tackle.

Of course the above conclusions relative to the comparative strength of these formations for different types of plays would have to be altered in view of special ability on the part of individual players on the opponents' team. Naturally, an expert passer makes the passing game a serious threat regardless of the formation. However, granted standard personnel, the possibilities of the various types of attack from this formation are about as indicated.

The single wing-back formation affords great strength off tackle on the strong side and considerable strength for bucking. It is only fair for passing and, unless the defense over-shifts, is weak to the weak side. In recent years some weak side plays have been gaining considerable ground due to the fact that the defense has over-shifted to counteract the concen-

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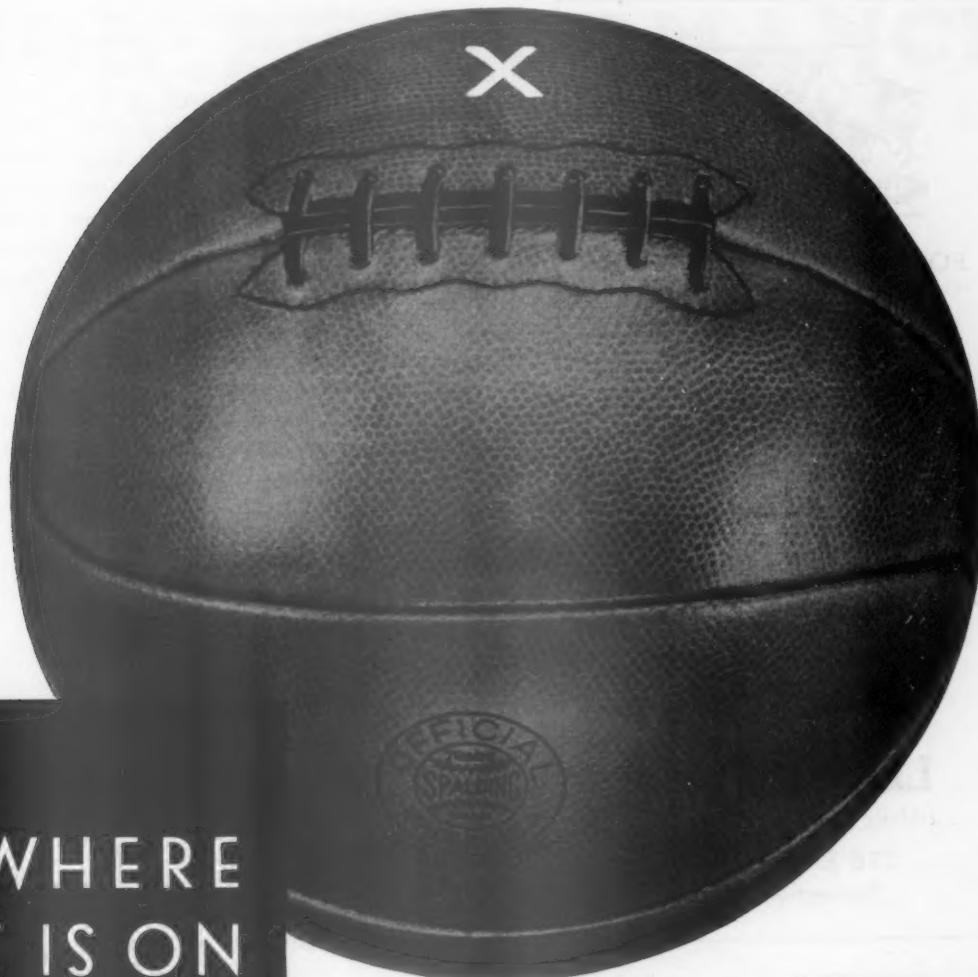
tration of strength on the strong side tackle. In planning the defense for this type of offense, it is usually wise to reenforce the strong side tackle by shifting the guard on that side pretty well to the outside of the offensive tackle.

The short punt affords strength for bucking and is a strong formation for the passing attack, since the men are all loose, the passer well back, and the receivers in position to spread to all parts of the field. It is, however, relatively weak on running plays since there is usually no one to flank the defensive tackle. This means that the defensive tackle has little to worry about from the outside and can usually break up any plays coming his way.

After analyzing the possibility of the formation to be encountered, the defensive linemen should be spaced in such a way as to give each man a reasonable assignment. The assignments should be less severe at those spots where the offense presents the strongest attack, since it is at these points that the majority of the plays will be directed. It should be borne in mind that no definite spacing of the defensive linemen will suit all formations. The spacing and arrangement should differ with each type of formation.

In addition to individual tactics and to proper spacing, effective defensive line play requires a high degree of cooperation among the several linemen. An effort should be made to get at least one of the inside linemen into the opponents' backfield on every play. Naturally, tactics that will result in getting across the line standing up are tactics that are what might be termed gambling tactics. In other words, the man has to take a chance on being taken out of a play or on getting through standing up. More conservative tactics enable a player to stop the plays at or near the line of scrimmage but seldom put him through for a clear tackle behind the line. If one player gambles on getting through, the man next to him should employ conservative tactics. The methods may be interchanged between players at frequent intervals in the same game or sometimes one player will attempt the spectacular throughout the entire game while his team mate holds the fort. The important thing is—and this may be stated as a fundamental principle in defensive line play—that adjacent linemen should never employ the same tactics on the same play.

The writer recalls distinctly one big game in which the center was continually through the line making tackles for losses. The newspaper accounts naturally gave the center



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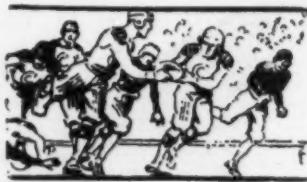
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great credit, and well deserved credit, for his play in this game. He played a great game and so did the guards, but the guards hardly figured in the newspaper accounts at all. As a matter of fact, it was pre-arranged that the guards should pile things up on the line of scrimmage, leaving the center free to knife through and try to make tackles behind the line. The very next Saturday the same team played another opponent and reversed these tactics. In this game the two guards made the spectacular showing while the center played a more conservative type of game and piled everything up on the line of scrimmage. In the one game the type of play employed by the opponents made it advisable to send the center through, whereas the next Saturday the attack of the opponents indicated that it would be more effective to send the guards through. In no event, however, is it wise to have all three of the middle men try to knife through. This is too dangerous in case the opponents should start driving up through the middle. On the other hand, it is unduly conservative to have all three of the middle men dive under or pile up in the middle on every play. There should be some definite attempt made to get at least one of the defensive players behind the opponents' line on every play. In the writer's opinion, it is better defense to let the opponents make four yards on one play and throw them for a two-yard loss on the next than it is to stop them for a one-yard gain on each play. There is nothing much more disconcerting to a team than to find an opponent mixed up in their backfield at frequent intervals. Even though they gain occasionally, a defensive lineman jumping through once in a while and tackling for a loss tends to destroy their confidence and frequently causes them to doubt the efficacy of their plays.

Of course, if a coach is so fortunate as to have a team that is definitely superior to the opponents he is called upon to play, it is not necessary to concentrate his strength at any particular spot. However, most of us are confronted with the problem of trying to win from teams that are just as good as or a little better than ours. When this is true, the coach cannot hope to stop the opponents unless he arranges his defense in the most advantageous way. As already stated, an analysis of the formation helps a great deal. If, in addition, the coach has knowledge of the individual characteristics of the members of the

opponents' team, it should make his job of analysis much simpler.

In one game played recently between two large universities of the Middle West the admittedly weaker team was able to win because they were willing to take a chance and concentrated their defensive strength against the known strength of the opponents. We will call the better, but defeated team, Team A, and the other team, Team B. Team A used the double wing-back formation and had made consistent marches against every opponent they had met. Their fullback was an exceptionally agile, quick and fast man but was quite light as fullbacks go. He had made a great deal of ground in previous games but none of it was made by smashing directly through the line. Nearly all his gains were made by spinning through tackle after bluffing a pass to another back, or on slightly delayed backs just inside the defensive tackle. It was observed that practically all of team A's strong plays hit in one of three spots: just inside of tackle, just outside of tackle, or around end. In planning a defense for this game, Team B played their defensive tackles well outside the opponents' ends, their defensive guards on the outside shoulder of the opponents' tackles. This left the defensive center opposing, in reality, all five of the middle linemen. The defensive fullback was told to back up the center, the halfbacks played fairly close to the line and rather wide. This defense obviously was planned to stop plays directed at the three spots mentioned above. It was reasoned that these plays which had been so successful all season would be the first ones to be used, as in fact they were. It was reasoned further that since Team A had not made much ground coming up through the middle in previous games they would not be apt to try that territory much in this game.

The above reasoning proved correct. Team A was unable to make ground on their favorite plays and in desperation turned at last to passing. This was exactly what Team B hoped for, since their passing defense was especially strong. As a result, by intercepted passes and continuing to stop A's strong plays, Team B was able to win the game.

This illustration is cited merely as an example of how an inferior team by properly concentrating its forces, and perhaps also by taking considerable chance, was able to defeat a superior team. It shows the possibilities of a careful analysis of the opponents' attack.

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Early Plans for Basketball**By R. H. Hager**

Supervisor of Physical Education, Tacoma Public Schools
Author of "Percentage Basketball"

WITHIN the twinkling of an eye football togs and fond memories will be put away in our treasure chest, and the cage game of the maple court will be given the center of our athletic stage. Already players are speculating on their chances to hold down the coveted positions on the first string. Relative strength of rival teams is being catalogued by the coach.

With the enthusiasm of a new season and all that it promises, through our early hopes sometimes, comes carelessness of planning. So often a coach, especially if he is an old head, will plan a master's course for a beginner squad. The veteran coach through his many years of experience has learned much, and his mind is full of good ideas, tried and true. He seldom realizes that perhaps he may not be able to teach, in a few weeks or months, all that he has learned through years of experience.

The same condition often prevails with the younger coach who has fortified himself with technical books on the game, and who feels competent to administer all he has read regardless of the make-up of his squad.

I learned to fly after some seven hours in the air, but this did not come all in one dose. In fact it came in very small daily doses over a period of about three weeks. There is a lesson for us all as coaches to learn from this. To be able to give out the correct amount of information each day to the squad is the greatest problem of a coach in any sport.

Look your squad over on paper. Ask yourself these questions:

1. How many veterans will I have?
2. What is the experience of the new players whom I will have?
3. Wherein were the individuals on my teams weak last season?
4. What strength will my various rivals have?
5. What have my players been doing since school opened in the fall?
6. How much time will I have before the opening game?

The content of your opening program should be very largely governed by your answers to these questions.

Think back over your preceding season and learn what you can by the second guess method in games you lost and nearly lost. Most of us have reasons, acceptable to ourselves at

least, for having lost games. Sometimes they are mistakes which may be corrected by the next game. But many times these are mistakes of the season, the type it is too late to correct. The most discouraging of these is the realization that you may have let your creative instinct get the better of you. As a result you have crowded your team; expected the impossible of them in details of intricate team play. To begin with a new squad where you left off with a veteran squad is a sad mistake. It is a hard lesson to learn, but a sound one, that during some years you may not be able to teach all you know about basketball.

You may have to make the best of the natural ability on your squad this year and save your brainy attack for next season when you may draw the Phi Beta Kappas on your squad.

Plan your offensive attack early and work to perfect it. All definite, well planned, offensive attacks are not difficult. Variations and innovations in those attacks may be just as difficult as you may wish to make them. I thoroughly believe in a definite team attack. Long, complicated, combination set plays are not always the most effective. Set plays may be extremely simple and still be infinitely valuable in your attack. Deception, finish and timing are the qualities essential to effective set plays. The number will depend on the capacity of your squad. It is possible to carry part of your squad further along this line than the rest. There are effective set plays which involve only two men. If you have two boys on your team who seem to have greater mental playing capacity you may build up many set plays around them which will not be necessary for the rest of your team to memorize.

Plan your defensive play just as carefully. A variation in your defensive play is effective, but here, too, you must be governed by the experience and mental capacity of your squad. One system of defense well played is worth two or three poorly organized systems.

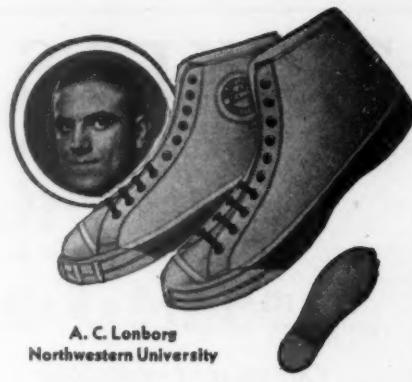
Determine early what your chances are to control the tip-off. Do not spend valuable practice time in running through center plays which will never be used. If you are doubtful about the tip or if you are quite sure that you cannot control it, use your



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time to perfect a defensive tip-off attack.

Do not fail to develop your reserve strength. It is pretty easy to get in the habit of concentrating on the first five men and to disregard the many times during the season when the outcome will depend very largely on this strength.

Buy your equipment carefully and plan to take care of it. It takes a corps of trained student managers to keep the machinery behind the scenes running smoothly. Proper daily attention to ball inflation and drying of uniforms is an essential part of your season's plan.

First aid materials, proper and prompt care for injuries and early adherence to training rules are important to the success of your season.

The feet of most basketball players are too tender at the outset of the playing season to stand the strain of strenuous daily workouts. Sore feet make players irritable and slow, and certainly cause poor timing for all of your play formations. If possible, have your players practice first in their old shoes and break in new shoes gradually.

Watch tender places and tape them before the harm is done. Proper cleansing and drying of the feet are of paramount importance to healthy feet.

Do not indulge in lengthy chalk talks early or late in your season. Chalk talks are most effective when given to your players in their street clothes, and at times other than regular floor practice time.

Provide as many basketballs as possible for early season practice. It will greatly improve the shooting, dribbling, and passing ability of your squad and make for interest by providing activity for the large numbers which are usually on deck for the early season practice.

As soon as possible in the season begin to separate your squad into specialized groups, so that each group will overcome their particular weaknesses.

Scrimmages in early practice should be short and just frequent enough to keep the squad happy and interested.

Discourage the forming of cliques with favorites for the team. Guard early season publicity. Locker room practical jokes, where some player is always made the goat, are bad and must be discouraged if you hope to maintain the proper team morale.

Give thought to the details of your players' relationships to each other, and to the student managers. Talk over these relationships at the very

start of the season. Many a basketball team has been handicapped by the fact that some student manager has not been tendered the courtesy due him, and the coach in straightening out the affair has broken the spirit of a player. These difficulties may be avoided if early attention is given to them.

Make out a time budget giving sufficient time to all fundamentals. Too often we assume that we have given more time than we have to the various departments of the game.

Arrange your practice so that the fundamentals which may be practiced by an individual, such as goal shooting and dribbling, come first. This will permit the early arrivals to start as soon as they get on the floor. If you are limited in equipment, you should see that the early arrivals are changed to practice on footwork, stops, starts, turns and pivots, as soon as they have had their shooting practice. The balls may then be used by other members of the squad who arrive a little later. Each player may well afford to spend a half hour on basket shooting each day if it is a two hour practice period. Footwork is strenuous work, and hard on the feet and legs; fifteen minutes of this type of practice is enough. Form should be stressed rather than speed. Stops are especially hard on the feet and should be taken in small doses early in the season to avoid blisters and sore toes.

The following game conditions are responsible for results of contests many times, but are usually slighted in practice:

1. Defensive center tip-off play.
2. Defense against out-of-bounds play.
3. Defense in case of foul line play at own and opponent's basket.
4. Defensive and offensive plays following held ball.
5. Tactics to stop stalling game.
6. Strict adherence to rules of game.
7. Mechanics of the game (substituting, time-out, captain talking for team).

Plan details of your season and administer them in small doses. Treat the members of your team as individuals. Look for progress and use versatility to make for interest. Avoid having the team arrive at the peak of form too early. Reduce squad to workable size, but only after careful, impartial attention to all first team possibilities. Do not bemoan the loss of material. Your results depend very largely upon the confidence you have in boys to do their best.

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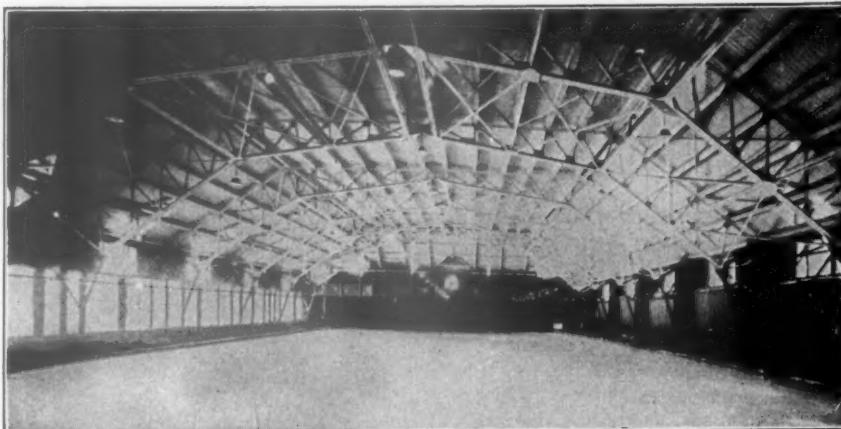
Enclosed are photographs of an installation at Bear Mountain Park, Iona Island, New York.

The large pavilion which is used for roller skating in the summer time and ice skating in the winter is 100x200 and open at all four sides so you can see what the four speakers mounted at one end have to accomplish in order to give plenty of undistorted volume for skating.

We have made two similar installations at Hook Mountain, each with four of your speakers.

Not only are we pleased, but the Park Commissioners are more than satisfied, and have voted their entire approval. Prior to our installation they tried several different kinds of sound equipment but were never able to get satisfactory results either in volume or quality. However, with all installations they have ample volume with a reserve which never makes it necessary to operate at full volume and at the same time gives them a quality of reproduction that leaves nothing to be desired.

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By: (Signed) L. Guckenheimer.



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Why College Distance Runners Cease Com- petition After Graduation

By R. Clay Bailey

Former Captain of Cross-country,
Birmingham-Southern College

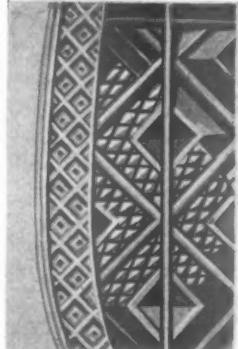
PERHAPS the greatest single reason why college distance runners discontinue active participation in cross-country immediately upon graduating from college is because of the belief, widely prevalent among college athletes, that distance running, continued over a long period of years will result in "athlete's heart." After hearing their teammates and other friends talk of the physical evils that may result from prolonged competitive racing they are persuaded that there must be something to the theory that Marathon jogging is injurious to the body.

Economic necessity and personal preference place the distance stars immediately in the professional or business world following graduation. Here the keenness of competition takes a large part of the athlete's time and tires him to such an extent that he feels unequal to the task of training for one of the most exacting of sports. Perhaps he plans to eventually resume cross-country, but procrastination adds poundage and decreases endurance so that ordinarily the idea is abandoned, either from dread of the effort necessary to getting back into condition or from indifference.

Undoubtedly running loses much of its glamor after a "thinly-clad" clips off the final race for his Alma Mater. While in college there is always the atmosphere of noble tradition to inspire effort. And often large and sympathetic crowds are present to spur the runner on. Afterward these elements are generally absent.

Opportunities for competition are necessarily limited after the distance runner leaves the halls of his college. There are clubs, but the number of runners desired by them is small, and in certain sections of the country there are few of these athletic clubs. Often, also, distance running is not included on the program of sport organizations. So that often a harrier, desirous of competition, must train and participate as an independent runner without the benefit of team training.

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Physical Decline and Deterioration of the American Youth

By John L. Griffith

THAT the boys of today do not possess the stamina, virility and endurance that characterized American youth of an earlier day is a claim that is commonly being made.

Those who believe that our present day young Americans do not equal in strength their fathers offer different reasons for this physical decline. Among the causes that have been set forth are the automobile, easier modes of living and working and the general decay that is commonly supposed to accompany financial prosperity.

Since the American team that competed in the track and field meet recently in Chicago against a British Empire team did not win any of the long distance relay races, since America has not won many 800, 1,500, and 3,000 meter races in the Olympic games recently and since the majority of the men selected to represent America both in the British Empire meet and in the Olympic games have in the last ten years been college athletes, the point is made that this decline previously referred to has been distinctly evident in the colleges.

The life insurance statisticians have suggested that the youth starting out in life today has a better chance to live to a ripe old age than did the child who was born thirty or forty years ago. Is it true then that, even though, because of improved knowledge of sanitation, methods of combating infectious diseases, and care of the health generally, the American boy has a better life expectancy than had the boys of an earlier day, yet the youngsters of this generation are less able to withstand fatigue and perform feats of strength and endurance than the boys of the late nineties or the early nineteen hundreds? The old football man complains that the youth of today could not have withstood the rigors of the old pushing and pulling five yard game, and talks about the days when men were men. Men who in their earlier days worked from twelve to sixteen hours a day and who have amassed their share of the world's goods, noting that their children are not forced to work so hard, quite naturally believe that their boys will not be able to endure as they themselves endured. A New York University professor has estimated that the machinery in the

United States generates power equal to that of twelve billion slaves. Some have consequently blamed this machine age for the physical deterioration which has set in, or which they believe will be in evidence in this so-called softening civilization. Whether or not the same debilitating influences that were found to be operative in Roman civilization following the Augustan age may be expected to take their toll in American civilization remains to be seen. There are, however, some definite figures at hand which show clearly that, judged from records made in such endurance contests as our distance races that are to be found on the college sports programs, the college athletes, at least, are refuting the claims that are being made by those who are pessimistically inclined.

With a view to ascertaining whether or not the college distance runners who have competed in the half mile, mile and two mile runs as undergraduates in the last ten years are as sturdy a lot as those who competed in the same events in the preceding thirty years, the records which stood in 1920 in a number of the representative colleges have been compared with the records that have been placed on the books after the track season of 1930.

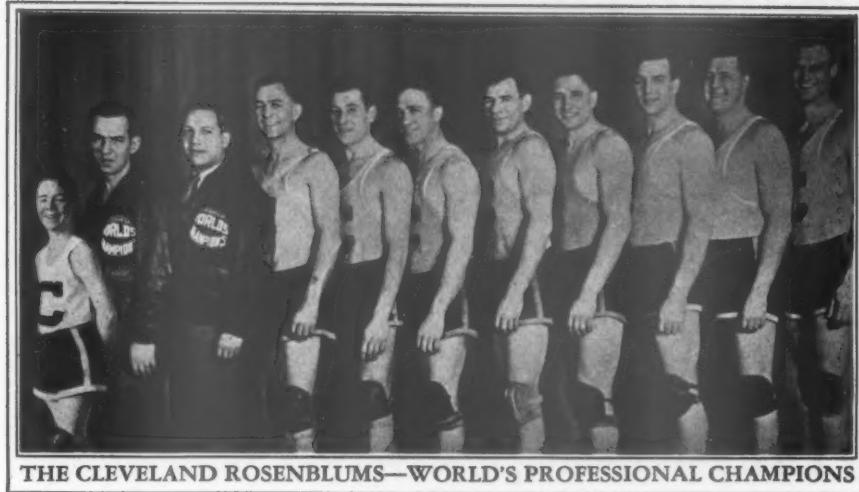
The United States Military Academy is attended today and has through the years been attended by young men who are above average physically. At this institution the best record that had been made in the half mile run up to 1920 was established by Heidler. This record was two minutes flat. This record, however, has been beaten in the last ten years and is now held by Lermond at 1:55.2. The mile run record in 1920 of 4 minutes 23 1/5 seconds has been lowered to 4 minutes 15.2 seconds and the two mile run from 9 minutes 36 2/5 seconds to 9 minutes 28 seconds. At the University of Pennsylvania the old records in the half mile and mile established by Ted Meredith and W. C. Paul have not been surpassed by the newer generation of distance runners, but Montgomery has improved upon the two mile run record formerly held by W. McCurdy.

At Harvard the old half mile record of 1 minute 54.2 seconds held jointly by William Hollister and William J. Bingham has not been sur-

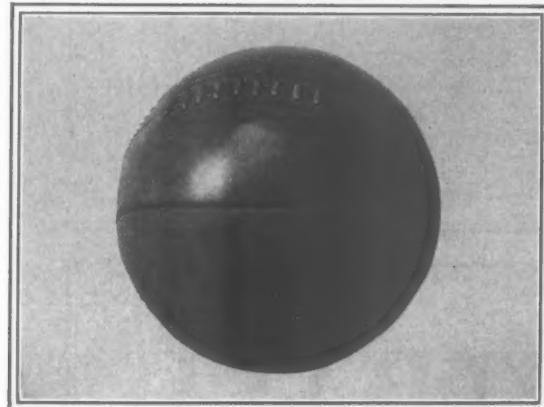
passed in recent days by Harvard men, but the records that stood in 1920 in the mile and two mile have been lowered by J. W. Burke and J. Reid, respectively. At Colgate University the present records in the half mile and two mile are better than the records that had been established up until 1920, but the old record of 4 minutes 27 1/5 seconds in the mile has not been surpassed. Harry Hillman of Dartmouth reports that recent athletes have broken the old Dartmouth records in the half mile and two mile, while Harmon's record of 4 minutes 18 4/5 seconds established ten years or more ago in the mile has not been improved upon. At Boston College all of the records in these three events have been lowered in the last ten years, while at Annapolis the records in the half mile and two mile have been lowered, but the old record in the mile still stands. All of the records in these three events have been improved by the distance runners at the University of New Hampshire in the last ten years. Thus it is clear that the stamina and endurance of recent Eastern college men, judged by the records established in the long distance runs by college athletes, do not suffer in comparison with the stamina and endurance of the college men of other days when judged by the same standards.

In that section of the country north of the Mason and Dixon line and west of the Alleghenies the same results are in evidence. At the University of Pittsburgh the records in these three events have been appreciably lowered by the athletes of the last ten years, and Nat Cartmell's distance men have in the last ten years broken all previous records at Penn State. All of the old records likewise have been broken at Ohio State University; Western State Teachers College, Kalamazoo, Michigan; Miami University, Oxford, Ohio; Iowa State College, Ames, Iowa; Butler University, Indianapolis, Indiana; Ohio Wesleyan University, Delaware, Ohio; Indiana University; Michigan State College; and Michigan State Normal College. At the University of Chicago, A. A. Stagg developed some exceptional distance runners during the period from 1892 to 1920 inclusive. One of these men was Joe Stout, who still holds the record in the mile and two mile runs, and the record in the

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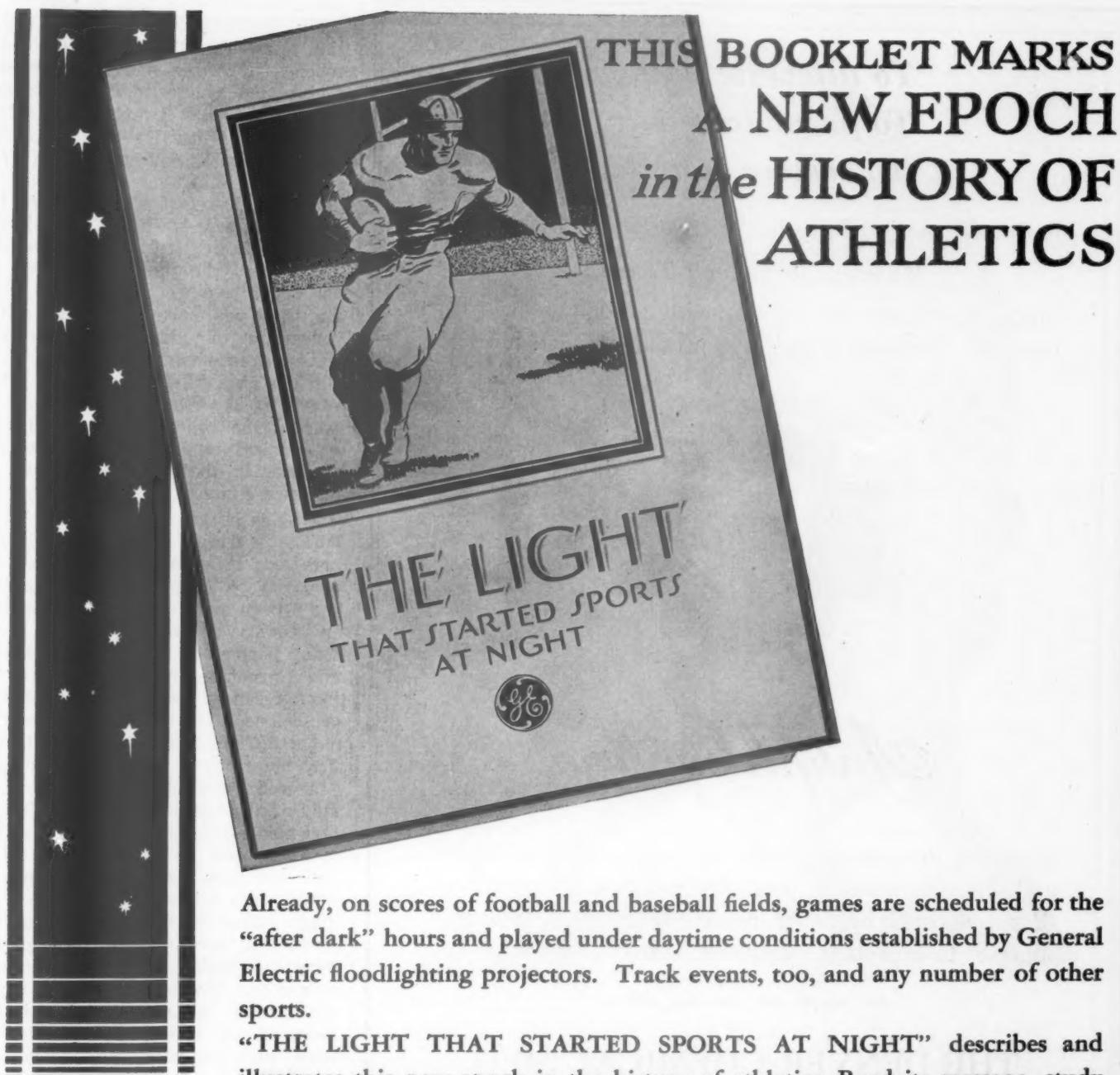
6858 Glenwood Ave., Chicago

half mile was made by Campbell, also of pre-prohibition days. At the University of Illinois the records in the half mile and two mile have been lowered, but the old record of 4 minutes 18 2/5 seconds in the mile established by Mike Mason in 1916 has not been broken. All of the records in these three events have been lowered in the last ten years at the University of Kansas and at the University of Oklahoma. The distance runners who have represented Oklahoma A. & M. College in the last ten years, according to the records, have been far superior to those who represented the same institution in the same events prior to 1920.

In the South the reports show a similar breaking of records in the endurance events. At North Carolina State College the records in these three races have been appreciably lowered, as they have been at the University of Tennessee, at Georgia Tech, and other well-known institutions of the old South. The records likewise that stand today at Texas Agricultural College in the half mile, mile and two mile are better than the records that stood on the books in that institution in 1920. A study of the distance runs' records at Southwestern Texas State Teachers College reveals that they are all in favor of the present day athletes.

A review of records in the institutions located far west do not indicate any decline on the part of the younger generation. At the University of Washington the records of 1 minute 55 seconds in the half mile; 4 minutes 16.8 seconds in the mile; and 9 minutes 27.3 seconds in the two mile are vastly superior to the records that had been made by University of Washington men before 1921. At Oregon State College the records in the half mile and the mile have been lowered, but the two mile run record remains the same. "Gene" Nixon's track men in the last ten years at Pomona College have not improved upon the half mile record of 1 minute 56 1/5 seconds, which was established in 1918, or the mile record of 4 minutes 26 1/2 seconds, which was made before the last decade. Likewise, the old 1920 record in the two mile still stands at Pomona. At the University of Southern California, however, the records in all three of the distance runs have been lowered, as have the records at Washington State College.

The track coaches who assisted in the study made to determine whether or not our present day athletes are losing their stamina were almost unanimously of the opinion that such is not the case. They presented different reasons in addition to the



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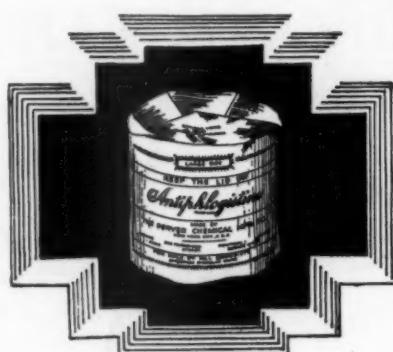
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incontrovertible records in support of their conclusions. Some called attention to the fact that the college track coaches of today had more trained high school athletes to work with than did the coaches twenty and thirty years ago. Others called attention to the fact that coaching methods have improved. Whatever reasons may be advanced, the fact remains that the college runners of the last decade are superior to the distance runners who represented the same institutions in the forty year period prior to 1920, and those who have concluded that the college boy of today does not excel in the endurance contests base their conclusions on a false premise. In other words, if the record books are to be trusted the college distance runners in the last ten years have been far superior to the older generations of distance runners in this country.

Why is it then that men like Wide, Ritola, Nurmi, Kohlemainen, George and Lowe have demonstrated their superiority in endurance races against the college men who have represented this country in recent games? A great many people are asking this question and a great many suggestions are being offered in the way of improving conditions. The question, however, is not a difficult one to answer. In the first place, while nineteen and twenty year old boys may often beat older men in the sprints, hurdles, jumps, and field events, they do not have the stamina that is possessed by thirty year old men, and that is a prerequisite for successful distance running. Most of the members of the American team in the British empire meet and most of the men who won points for America in the last Olympic games were under twenty-five years of age. The great distance runners, with few exceptions, have been over twenty-five years of age and many of them have been thirty or more years old at the time when they turned in their best performances. It has already been pointed out that the college distance runners of today are superior to the college distance runners of an earlier day. Consequently, those who would attempt to improve our chances in future Olympic games, especially in the distance runs, hardly need devote their attention to the college athletes, unless the college rules be changed to permit post-graduates to compete in athletics.

When our college men graduate they usually, as soon as possible, take up the work or the profession for which they have been trained. They do not devote several months each year to distance running, nor can they do so without being left behind in their business or professional com-

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petitions. The way then to develop men who reasonably might be expected to hold their own with some of the European distance runners, many of whom have been running for twelve or fifteen years, is to create a professional amateur class of distance runners in America. The men who compete in the Davis Cup Championships are practically forced to spend at least four months out of the year playing tennis, attending tournaments and training for them. Fortunately we do not have a professional amateur class of track and field men in the United States. There was a time when the clubs kept college athletes for a number of years after the latter had been graduated, but for some reason or other the old established athletic clubs have one after the other abandoned their policy of subsidizing amateur athletes, and our college athletes are seldom possessed of enough means to enable them to live a life devoted almost entirely to sport. If we look at this question from the standpoint of the boys, it is well that they do hang up their spiked shoes following graduation, enter upon the work in which they have decided that they have a fair chance to succeed, and, instead of training assiduously for distance running, play such games as golf, tennis, squash, and hand ball, when and where they can, just so long as these sports do not interfere with their work.

Many people arrive at wrong conclusions because they start with false premises. The man who starts his syllogism with the premise that college distance runners of today lack the vitality, stamina and endurance of college distance runners of an earlier day cannot reach a proper conclusion because the premise is false. We may blame prohibition, prosperity or what not for all of the ills that are supposed to afflict the younger generation, but no one can show that these or any of the other controversial disturbing factors have affected the colleges to the extent that the young men of today cannot stand the punishment that the distance runs entail and cannot do so well in those events which test the stamina of the competitors as did the athletes in the pre-prohibition days, in the days when we did not talk about American prosperity or in the days when much of our work was done by man rather than by machines.

ATHLETE'S FOOT

Athlete's Foot, or as it is more often known, Ringworm of the Feet, Trench Foot, Foot Itch, or Gym Itch is a fungus which resembles the mould that grows on stale bread.

It is found in warm, damp places, grows very rapidly and when it comes in contact with the feet, it penetrates into the sub skin tissue through small cracks in the skin, causing it to crack and peel off, especially between and under the toes. Red splotches appear, itching is intense and small water blisters form which break and spread the germs over larger surfaces or on gym floors, showers, pools or wherever people may walk while barefooted.

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This disease may attack knees, elbows, hands or any part of the body, but it is more often found in the feet. No one is immune. A case may be cured up and become re-infected the next day.

The Government Public Health Service found that over 75 per cent of the men students of a large university were infected with the disease. Most cases were mild but some severe enough to prevent walking and some required months to cure.

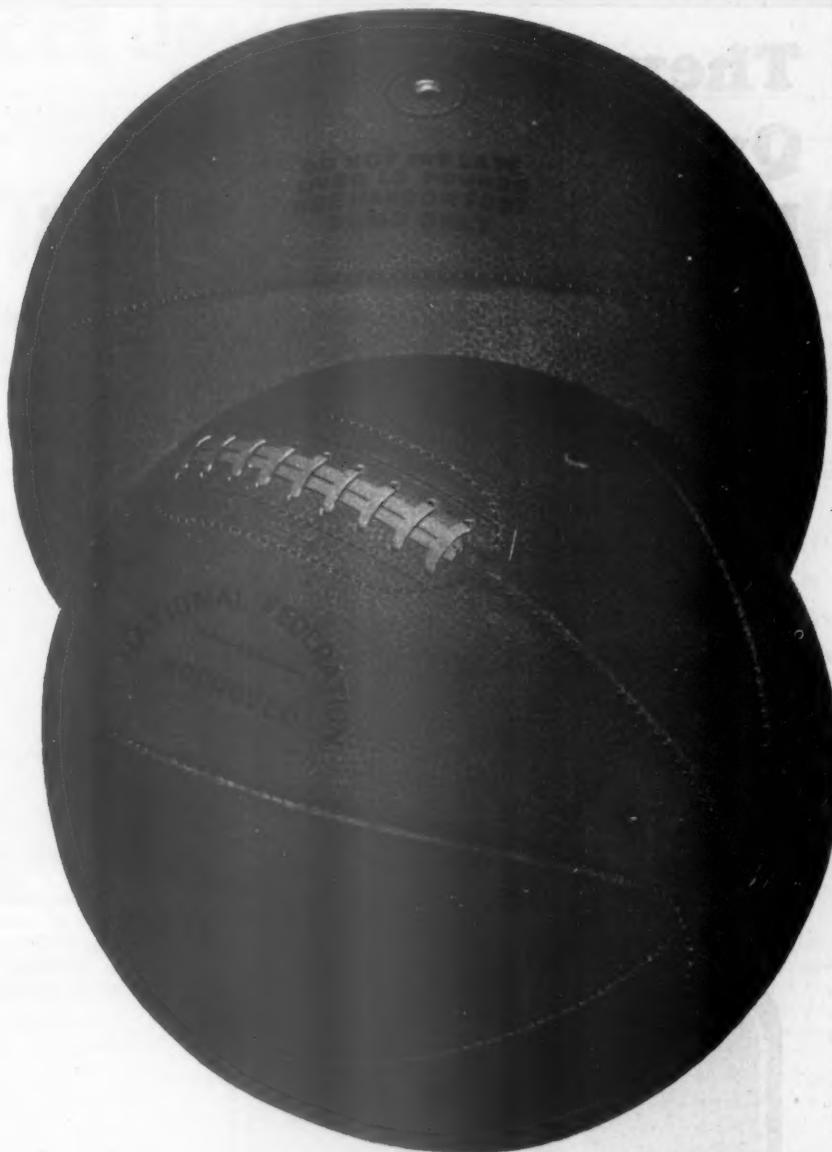
Because of the prevalence of the disease, it is important that every one take precaution to prevent the spread. Sandals may be used to keep the feet off the floor.

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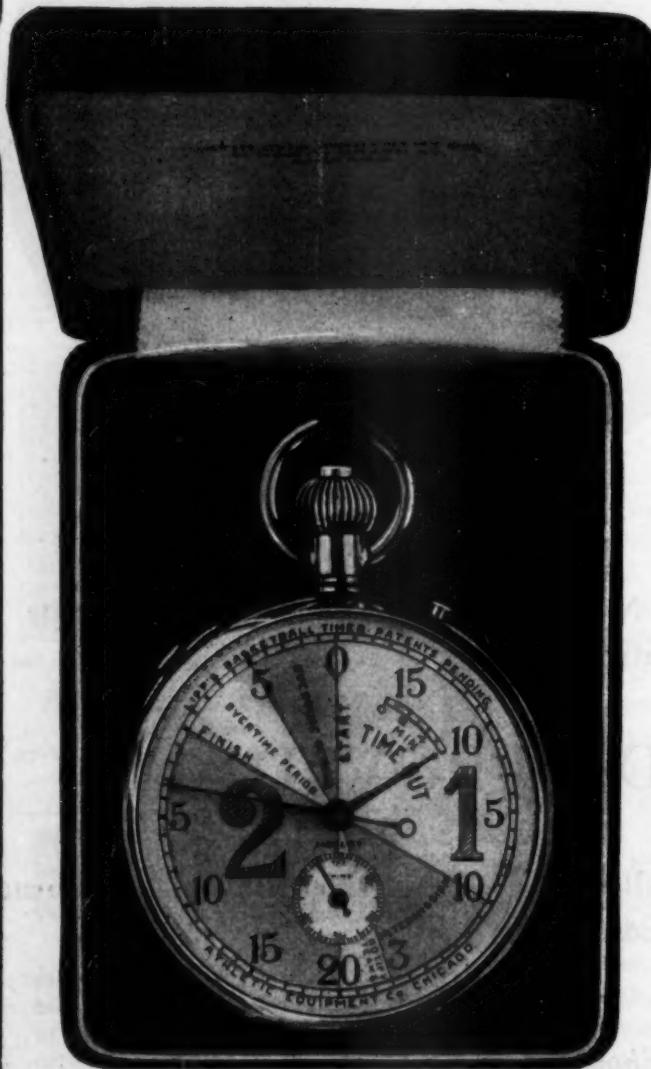
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By Lester G. Benz

Basketball Coach, High School,
Fort Dodge, Ia.

AT the present time, thousands of high school coaches are beginning to develop basketball teams for the coming season. Many schools begin their practice early in the fall, a month or two before the first game of the season. Often a coach will start practice early with the idea of putting a finished team on the floor for the opening game. Others begin practice only a week or two before the season opens and develop their teams slowly with the idea of gathering momentum as the schedule progresses.

The latter system is psychologically the sounder of the two plans. A team that is thoroughly drilled and keyed up early in the season may look good for a time, but this high pitch can be maintained only for a limited time and, sooner or later, the team will crack and fall into a slump. This slump often comes during the most important part of the schedule with disheartening results.

Most coaches want their teams to be functioning at their best late in the season for important games or for tournament play. The season should then be planned so that the team is at the peak of perfection when this time comes.

This plan may well begin with the making of the schedule, starting with a number of easy practice games and gradually building up to the more important games of the season. Under this system, the first games of the season are often played with a minimum of team play learned, sometimes only a defense. Very frequently a team will play through the first part of a season without any out-of-bounds plays or tip-off formations at all, learning these later on in the season.

This slow development is particularly important in training high school teams. High school boys will learn much more slowly than college players. For one thing, they do not have as much experience. Neither are they capable of as intensive and prolonged concentration as the college man. Many young coaches just out of college fail to recognize this fact and make the mistake of trying to teach their teams too much in too short a time. This results in the men becoming so confused that they do not execute any of their plays effectively. The successful high school coach will make allowance for this slower learn-

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ing ability in developing his team and give out new plays only as fast as the team can assimilate them.

At this point I wish to emphasize the fact that I am considering only team play and not individual technique. Drill in fundamentals and the development of individual skill is a separate and very important phase of the coaching program. It should have a prominent place in the daily practice periods and be part of the regular "diet" for the team from the start of the season to the end. In this discussion we will consider only team play.

Working on the theory that the high school team should be developed slowly, it is best to start at the beginning of the season with teaching the team a system of defense. This should be the first thing taught, because a high school team can learn a good defense in less time than it can learn a good offense. A team will meet with pretty good results early in the season with nothing more than a good defense, well learned. A number of years ago a high school team in Iowa played and won four important games before Christmas without any organized offense at all. The entire time before the holidays had been spent in perfecting a good defense and the offensive side of the game was neglected until afterward. It is doubtful if this team would have had the same success with a strong offense but no defense.

After a reasonably efficient defense has been learned it is well to develop a quick break offense. These two phases of the game can best be developed at the same time, since in actual play the quick break starts when the defense is successful in breaking up the opponents' play. With an efficient defense and a well drilled quick break a coach has a sound foundation for a successful team. It will not pay to expect a team to learn more team maneuvers until these two most important phases of team play have been thoroughly mastered. There is a lot of wisdom for a coach in the saying, "Make haste slowly."

The next assignment for a team should be a system of delayed offense. While it is true that basketball plays should be more flexible than football plays because of the quickly changing conditions on the floor, nevertheless a finished team should have a number of diagrammed floor plays with each man having a definite assignment. High school boys can best learn but one such play at a time. The second should not be given until the first has been well mastered. Too many plays, which the boys are bound to get confused, are worse than none at all.

It will take the average high school team until well into the season to assimilate the main systems of offense and defense. This leaves center play and out-of-bounds play from both the offensive and defensive standpoints until later in the season for development. In this way there is always something new for the team to learn and the practice sessions are not apt to become monotonous.

By giving a team new plays only as fast as they can be learned, the boys will develop a feeling of confidence in themselves and in the team. This will help to build a fine team spirit, which is always a big factor in any team's success. The team that is constantly learning something new, without having so much that it becomes confused, gets the thrill of mastering something new. This is the best stimulus that a team can have. Slumps and staleness are usually caused by monotony. The lure of something new ahead helps to keep the team on the upgrade throughout the entire season. The team that is improving is always a most dangerous and respected foe.

Recruiting and Subsidizing

IN an article entitled "Pity the Poor Athlete," which appears in the November number of *Harper's Magazine*, the author in speaking about the Carnegie Report says, "By far the most significant statement in its 311 pages, hidden away in the middle of a chapter was the following: 'In no institution are subsidies granted to athletes in excess of the cost of tuition, food, lodging, books, supplies and incidental fees.' The Bulletin then goes on to stigmatize the grantors of such subsidies as 'the Fagins of American sport.'

The American colleges are making an effort to eliminate undesirable recruiting and subsidizing practices. Since this is true, however, some have gained the impression that all college athletics are corrupt. It is well to call the attention of such persons to the statement from the Carnegie Report, quoted above.

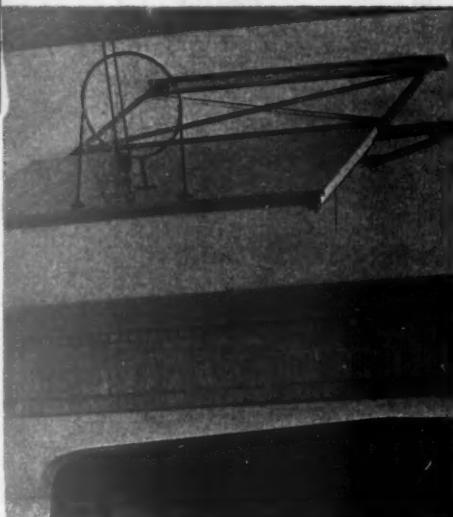
It would be a mistake, however, to assume that there had been no unfair or undesirable activities in connection with competitive competition for athletes. Not many conferences, however, have so far attempted to define illegitimate recruiting and subsidizing, and, consequently, not many have adopted definite rules relative to this matter. That being true, not many, of course, have adopted a penalty for a violation of rules pertaining to recruiting and subsidizing.

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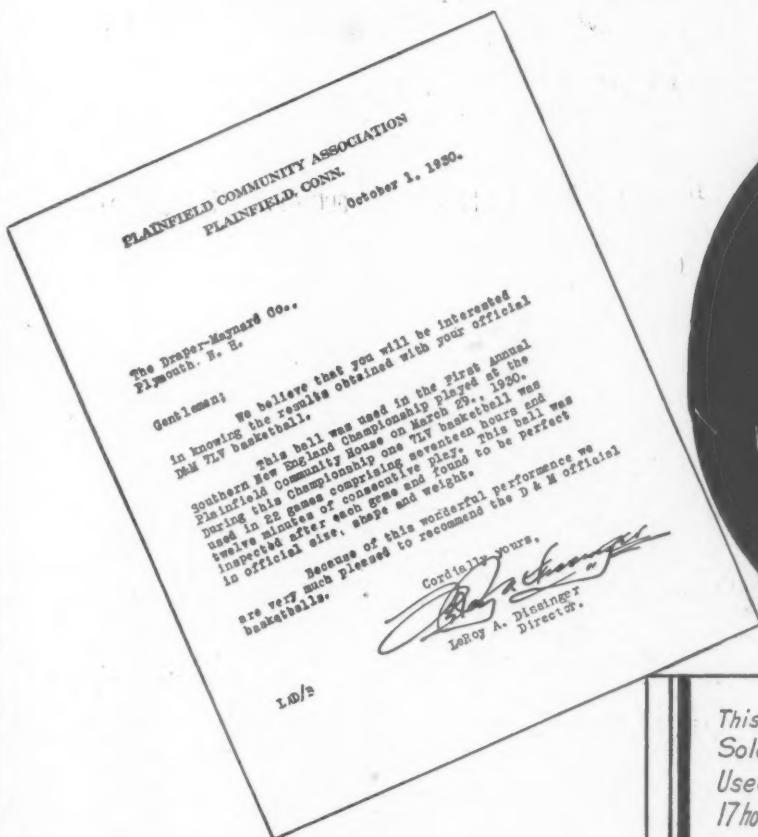
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